

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2017

Reviewed on 04/14/2017

1 Identification

- **Product identifier**
- **Trade name:** EHRlich'S HEMATOXYLIN
- **Article number:** 26040-05, 26753-01, 26040-06
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 Electron Microscopy Sciences
 1560 Industry Road
 USA-Hatfield, PA 19440
 Tel: 215-412-8400 Fax: 215-412-8450
 email: sgkcck@aol.com
 www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**
 ChemTrec 1-800-424-9300 Contract CCN7661
 1-703-527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS08 Health hazard

Resp. Sens. 1B H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Muta. 2 H341 Suspected of causing genetic defects.

Carc. 1A H350 May cause cancer.

STOT SE 2 H371 May cause damage to organs.



GHS05 Corrosion

Met. Corr.1 H290 May be corrosive to metals.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1B H317 May cause an allergic skin reaction.

- **Label elements**

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2017

Reviewed on 04/14/2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 1)

· **Hazard pictograms**

GHS02 GHS05 GHS07 GHS08

· **Signal word** *Danger*· **Hazard-determining components of labeling:**

Ethyl Alcohol, denatured
Methyl Alcohol

· **Hazard statements**

Highly flammable liquid and vapor.
May be corrosive to metals.
Harmful if swallowed or if inhaled.
Causes skin irritation.
Causes serious eye irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
Suspected of causing genetic defects.
May cause cancer.
May cause damage to organs.

· **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Use explosion-proof electrical/ventilating/lighting/equipment.
Do not breathe dust/fume/gas/mist/vapors/spray.
[In case of inadequate ventilation] wear respiratory protection.
Wear protective gloves/protective clothing/eye protection/face protection.
Ground/bond container and receiving equipment.
Keep container tightly closed.
Use only non-sparking tools.
Keep only in original container.
Take precautionary measures against static discharge.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing must not be allowed out of the workplace.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Specific treatment (see on this label).
If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Wash contaminated clothing before reuse.
IF exposed or concerned: Get medical advice/attention.
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Rinse mouth.
In case of fire: Use for extinction: CO2, powder or water spray.
Absorb spillage to prevent material damage.
Take off contaminated clothing and wash it before reuse.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2017

Reviewed on 04/14/2017

Trade name: EHRlich'S HEMATOXYLIN

(Contd. of page 2)

Store locked up.

Store in corrosive resistant container with a resistant inner liner.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 3

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 2

Fire = 3

Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

56-81-5	glycerol	25-50%
64-17-5	Ethyl Alcohol, denatured	25-50%
64-19-7	Acetic Acid Glacial	2.5-10%
67-56-1	Methyl Alcohol	≤ 2.5%

4 First-aid measures

· **Description of first aid measures**

· **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Immediately call a doctor.

· **Information for doctor:**

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

US

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2017

Reviewed on 04/14/2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 3)

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

- **PAC-1:**

56-81-5	glycerol	45 mg/m ³
64-17-5	Ethyl Alcohol, denatured	1,800 ppm
64-19-7	Acetic Acid Glacial	5 ppm
67-56-1	Methyl Alcohol	530 ppm
7681-55-2	Sodium iodate	0.83 mg/m ³

- **PAC-2:**

56-81-5	glycerol	180 mg/m ³
64-17-5	Ethyl Alcohol, denatured	3300* ppm
64-19-7	Acetic Acid Glacial	35 ppm
67-56-1	Methyl Alcohol	2,100 ppm
7681-55-2	Sodium iodate	9.1 mg/m ³

- **PAC-3:**

56-81-5	glycerol	1,100 mg/m ³
64-17-5	Ethyl Alcohol, denatured	15000* ppm
64-19-7	Acetic Acid Glacial	250 ppm
67-56-1	Methyl Alcohol	7200* ppm
7681-55-2	Sodium iodate	55 mg/m ³

US

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2017

Reviewed on 04/14/2017

Trade name: **EHRlich's HEMATOXYLIN**

(Contd. of page 4)

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect from heat.
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

56-81-5 glycerol

PEL	Long-term value: 15* 5** mg/m ³ mist; *total dust **respirable fraction
TLV	TLV withdrawn-insufficient data human occup. exp.

64-17-5 Ethyl Alcohol, denatured

PEL	Long-term value: 1900 mg/m ³ , 1000 ppm
REL	Long-term value: 1900 mg/m ³ , 1000 ppm
TLV	Short-term value: 1880 mg/m ³ , 1000 ppm

64-19-7 Acetic Acid Glacial

PEL	Long-term value: 25 mg/m ³ , 10 ppm
REL	Short-term value: 37 mg/m ³ , 15 ppm Long-term value: 25 mg/m ³ , 10 ppm
TLV	Short-term value: 37 mg/m ³ , 15 ppm Long-term value: 25 mg/m ³ , 10 ppm

67-56-1 Methyl Alcohol

PEL	Long-term value: 260 mg/m ³ , 200 ppm
REL	Short-term value: 325 mg/m ³ , 250 ppm Long-term value: 260 mg/m ³ , 200 ppm Skin
TLV	Short-term value: 328 mg/m ³ , 250 ppm Long-term value: 262 mg/m ³ , 200 ppm Skin; BEI

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2017

Reviewed on 04/14/2017

Trade name: **EHRlich's HEMATOXYLIN**

(Contd. of page 5)

· **Ingredients with biological limit values:**

67-56-1 Methyl Alcohol

BEI	15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)
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· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Solution

Color: Dark brown

· **Odor:** Alcohol-like

· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

(Contd. on page 7)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2017

Reviewed on 04/14/2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 6)

· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	78 °C (172 °F)
· Flash point:	17 °C (63 °F)
· Flammability (solid, gaseous):	Not flammable.
· Ignition temperature:	400 °C (752 °F)
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	0.9 Vol %
Upper:	15.0 Vol %
· Vapor pressure at 20 °C (68 °F):	59 hPa (44 mm Hg)
· Density:	Not determined.
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Fully miscible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	66.0 %
VOC content:	33.8 %
	338.0 g/l / 2.82 lb/gl
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

US

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2017

Reviewed on 04/14/2017

Trade name: **EHRlich's Hematoxylin**

(Contd. of page 7)

11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

67-56-1 Methyl Alcohol

Oral	LD50	5628 mg/kg (rat)
Dermal	LD50	15800 mg/kg (rabbit)

- **Primary irritant effect:**

- **on the skin:** Irritant to skin and mucous membranes.

- **on the eye:** Irritating effect.

- **Sensitization:**

Sensitization possible through inhalation.

Sensitization possible through skin contact.

- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

64-17-5	Ethyl Alcohol, denatured	1
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- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability** No further relevant information available.

- **Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.

- **Mobility in soil** No further relevant information available.

- **Ecotoxicological effects:**

- **Remark:** Very toxic for fish

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

US

(Contd. on page 9)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2017

Reviewed on 04/14/2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 8)

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- | | |
|-------------------------------------|--|
| · UN-Number | UN1987 |
| · DOT, ADR, IMDG, IATA | UN1987 |
| · UN proper shipping name | Alcohols, n.o.s. (Ethanol, Methanol) |
| · DOT | 1987 Alcohols, n.o.s. (Ethanol, Methanol), ENVIRONMENTALLY HAZARDOUS |
| · ADR | ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL) |
| · IMDG | ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL) |
| · IATA | ALCOHOLS, N.O.S. (ETHANOL, METHANOL) |
| · Transport hazard class(es) | |
| · DOT | |
| | |
| · Class | 3 Flammable liquids |
| · Label | 3 |
| | |
| · ADR | |
| | |
| · Class | 3 Flammable liquids |
| · Label | 3 |
| | |
| · IMDG, IATA | |
| | |
| · Class | 3 Flammable liquids |
| · Label | 3 |
| · Packing group | II |
| · DOT, ADR, IMDG, IATA | II |
| · Environmental hazards: | |
| · Special marking (ADR): | Symbol (fish and tree) |

(Contd. on page 10)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2017

Reviewed on 04/14/2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 9)

· Special precautions for user	Warning: <i>Flammable liquids</i>
· Danger code (Kemler):	33
· EMS Number:	F-E,S-D
· Stowage Category	B
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· DOT	
· Quantity limitations	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L
· ADR	
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1987 ALCOHOLS, N.O.S. (ETHANOL, METHANOL), 3, II, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**· **Sara**· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

67-56-1 Methyl Alcohol

· **TSCA (Toxic Substances Control Act):**

56-81-5 glycerol

64-17-5 Ethyl Alcohol, denatured

64-19-7 Acetic Acid Glacial

67-56-1 Methyl Alcohol

517-28-2 haematoxylin

7681-55-2 Sodium iodate

· **Proposition 65**· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

(Contd. on page 11)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2017

Reviewed on 04/14/2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 10)

· **Chemicals known to cause developmental toxicity:**

64-17-5 Ethyl Alcohol, denatured

67-56-1 Methyl Alcohol

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

64-17-5 Ethyl Alcohol, denatured

A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS02

GHS05

GHS07

GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

Ethyl Alcohol, denatured

Methyl Alcohol

· **Hazard statements**

*Highly flammable liquid and vapor.**May be corrosive to metals.**Harmful if swallowed or if inhaled.**Causes skin irritation.**Causes serious eye irritation.**May cause allergy or asthma symptoms or breathing difficulties if inhaled.**May cause an allergic skin reaction.**Suspected of causing genetic defects.**May cause cancer.**May cause damage to organs.*

· **Precautionary statements**

*Keep away from heat/sparks/open flames/hot surfaces. No smoking.**Use explosion-proof electrical/ventilating/lighting/equipment.**Do not breathe dust/fume/gas/mist/vapors/spray.**[In case of inadequate ventilation] wear respiratory protection.**Wear protective gloves/protective clothing/eye protection/face protection.**Ground/bond container and receiving equipment.**Keep container tightly closed.**Use only non-sparking tools.**Keep only in original container.**Take precautionary measures against static discharge.**Wash thoroughly after handling.**Do not eat, drink or smoke when using this product.**Use only outdoors or in a well-ventilated area.**Contaminated work clothing must not be allowed out of the workplace.**Obtain special instructions before use.**Do not handle until all safety precautions have been read and understood.*

(Contd. on page 12)

Safety Data Sheet

acc. to OSHA HCS

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Trade name: EHRlich'S HEMATOXYLIN

(Contd. of page 11)

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment (see on this label).

If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Wash contaminated clothing before reuse.

IF exposed or concerned: Get medical advice/attention.

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Rinse mouth.

In case of fire: Use for extinction: CO₂, powder or water spray.

Absorb spillage to prevent material damage.

Take off contaminated clothing and wash it before reuse.

Store locked up.

Store in corrosive resistant container with a resistant inner liner.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

*· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.*

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

*· **Date of preparation / last revision** 04/14/2017 / -*

*· **Abbreviations and acronyms:***

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

*OSHA: Occupational Safety **Health***

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flam. Liq. 2: Flammable liquids – Category 2

Met. Corr.1: Corrosive to metals – Category 1

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Resp. Sens. 1B: Respiratory sensitisation – Category 1B

Skin Sens. 1B: Skin sensitisation – Category 1B

Muta. 2: Germ cell mutagenicity – Category 2

Carc. 1A: Carcinogenicity – Category 1A

STOT SE 2: Specific target organ toxicity (single exposure) – Category 2

Safety Data Sheet

according to WHS Regulations

Printing date 14.04.2017

Revision: 14.04.2017

1 Identification

- **Product identifier**
- **Trade name:** EHRlich'S HEMATOXYLIN
- **Article number:** 26040-05, 26753-01, 26040-06
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- ProSciTech Pty Ltd
11 Carlton Street, Kirwan QLD 4817 Australia
Telephone Number: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)
Emergency Contact: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)
- Emgrid Australia Pty. Ltd.
P.O. Box 118
The Patch VIC 3792
Australia
Tel: 03 9752 1785
Fax: 03 9752 1784
Website: www.emgrid.com.au
- **Further information obtainable from:** Product safety department
- **Emergency telephone number:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 Hazard(s) Identification

- **Classification of the substance or mixture**



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS08 health hazard

Resp. Sens. 1B H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Muta. 2 H341 Suspected of causing genetic defects.

Carc. 1A H350 May cause cancer.

STOT SE 2 H371 May cause damage to organs.



GHS05 corrosion

Met. Corr.1 H290 May be corrosive to metals.

(Contd. on page 2)

Safety Data Sheet

according to WHS Regulations

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(Contd. of page 1)



GHS07

Acute Tox. 4 H302 Harmful if swallowed.
 Acute Tox. 4 H332 Harmful if inhaled.
 Skin Irrit. 2 H315 Causes skin irritation.
 Eye Irrit. 2A H319 Causes serious eye irritation.
 Skin Sens. 1B H317 May cause an allergic skin reaction.

· **Label elements**

· **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms**



GHS02

GHS05

GHS07

GHS08

· **Signal word** Danger

· **Hazard-determining components of labelling:**

Ethyl Alcohol, denatured
 Methyl Alcohol

· **Hazard statements**

Highly flammable liquid and vapour.
 May be corrosive to metals.
 Harmful if swallowed.
 Harmful if inhaled.
 Causes skin irritation.
 Causes serious eye irritation.
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 May cause an allergic skin reaction.
 Suspected of causing genetic defects.
 May cause cancer.
 May cause damage to organs.

· **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 Use explosion-proof electrical/ventilating/lighting equipment.
 Do not breathe dust/fume/gas/mist/vapours/spray.
 Wear respiratory protection.
 Wear protective gloves/protective clothing/eye protection/face protection.
 Ground/bond container and receiving equipment.
 Keep container tightly closed.
 Use only non-sparking tools.
 Keep only in original container.
 Take precautionary measures against static discharge.
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Use only outdoors or in a well-ventilated area.
 Contaminated work clothing should not be allowed out of the workplace.
 Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.

(Contd. on page 3)

Safety Data Sheet according to WHS Regulations

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: EHRlich'S HEMATOXYLIN

(Contd. of page 2)

- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.*
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*
- Specific treatment (see on this label).*
- If experiencing respiratory symptoms: Call a POISON CENTER/doctor.*
- IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.*
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.*
- Wash contaminated clothing before reuse.*
- IF exposed or concerned: Get medical advice/attention.*
- If skin irritation or rash occurs: Get medical advice/attention.*
- If eye irritation persists: Get medical advice/attention.*
- Rinse mouth.*
- In case of fire: Use for extinction: CO₂, powder or water spray.*
- Absorb spillage to prevent material damage.*
- Take off contaminated clothing and wash it before reuse.*
- Store locked up.*
- Store in corrosive resistant container /container with a corrosion resistant inner liner.*
- Store in a well-ventilated place. Keep cool.*
- Dispose of contents/container in accordance with local/regional/national/international regulations.*
- **Other hazards**
 - **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.

3 Composition and Information on Ingredients

- **Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

56-81-5	glycerol	25-50%
64-17-5	Ethyl Alcohol, denatured	25-50%
64-19-7	Acetic Acid Glacial	2.5-10%
67-56-1	Methyl Alcohol	≤ 2.5%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

4 First Aid Measures

- **Description of first aid measures**
- **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Call for a doctor immediately.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

(Contd. on page 4)

Safety Data Sheet according to WHS Regulations

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: EHRlich'S HEMATOXYLIN

(Contd. of page 3)

- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire Fighting Measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and Storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect from heat.
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

AU

(Contd. on page 5)

Safety Data Sheet

according to WHS Regulations

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 4)

8 Exposure controls and personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

56-81-5 glycerol

WES Long-term value: 10 mg/m³

64-17-5 Ethyl Alcohol, denatured

WES Long-term value: 1880 mg/m³, 1000 ppm

64-19-7 Acetic Acid Glacial

WES Short-term value: 37 mg/m³, 15 ppm
Long-term value: 25 mg/m³, 10 ppm

67-56-1 Methyl Alcohol

WES Short-term value: 328 mg/m³, 250 ppm
Long-term value: 262 mg/m³, 200 ppm
Sk

· **Additional information:** The lists valid during the making were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 6)

Safety Data Sheet

according to WHS Regulations

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 5)

· **Eye protection:**

Tightly sealed goggles

9 Physical and Chemical Properties

· **Information on basic physical and chemical properties**· **General Information**· **Appearance:**

· Form:	Solution
· Colour:	Dark brown
· Odour:	Alcohol-like
· Odour threshold:	Not determined.

· **pH-value:** Not determined.· **Change in condition**

· Melting point/freezing point:	Undetermined.
· Initial boiling point and boiling range:	78 °C

· **Flash point:** 17 °C· **Flammability (solid, gas):** Not applicable.· **Ignition temperature:** 400 °C· **Decomposition temperature:** Not determined.· **Auto-ignition temperature:** Product is not selfigniting.· **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.· **Explosion limits:**

· Lower:	0.9 Vol %
· Upper:	15.0 Vol %

· **Vapour pressure at 20 °C:** 59 hPa· **Density:** Not determined.· **Relative density** Not determined.· **Vapour density** Not determined.· **Evaporation rate** Not determined.· **Solubility in / Miscibility with water:**

Fully miscible.

· **Partition coefficient: n-octanol/water:** Not determined.· **Viscosity:**· **Dynamic:** Not determined.· **Kinematic:** Not determined.· **Solvent content:**

· Organic solvents:	66.0 %
· VOC (EC)	33.80 %

(Contd. on page 7)

Safety Data Sheet

according to WHS Regulations

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 6)

· **Other information** No further relevant information available.

10 Stability and Reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological Information

- **Information on toxicological effects**
- **Acute toxicity**

· **LD/LC50 values relevant for classification:**

67-56-1 Methyl Alcohol

Oral	LD50	5628 mg/kg (rat)
Dermal	LD50	15800 mg/kg (rabbit)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Irritant to skin and mucous membranes.
- **Serious eye damage/irritation** Irritating effect.
- **Respiratory or skin sensitisation**
Sensitisation possible through inhalation.
Sensitisation possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Harmful
Irritant
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
Muta. 2, Carc. 1A

12 Ecological Information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxic effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Also poisonous for fish and plankton in water bodies.

(Contd. on page 8)

AU

Safety Data Sheet according to WHS Regulations

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 7)

- *Very toxic for aquatic organisms*
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

· UN-Number · ADG, IMDG, IATA	UN1987
· UN proper shipping name · ADG · IMDG · IATA	1987 ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL), ENVIRONMENTALLY HAZARDOUS ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL) ALCOHOLS, N.O.S. (ETHANOL, METHANOL)
· Transport hazard class(es) · ADG	
	
· Class · Label	3 Flammable liquids. 3
· IMDG, IATA	
	
· Class · Label	3 Flammable liquids. 3
· Packing group · ADG, IMDG, IATA	II
· Environmental hazards: · Special marking (ADG):	Symbol (fish and tree)
· Special precautions for user · Danger code (Kemler):	Warning: Flammable liquids. 33

(Contd. on page 9)

Safety Data Sheet

according to WHS Regulations

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 8)

· EMS Number:	F-E,S-D
· Stowage Category	B
· Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· Transport category	2
· Tunnel restriction code	D/E
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1987 ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL), 3, II, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Australian Inventory of Chemical Substances**

All ingredients are listed.

· **Standard for the Uniform Scheduling of Medicines and Poisons**

64-19-7	Acetic Acid Glacial	S2, S5, S6
67-56-1	Methyl Alcohol	S5, S6

· **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms**



GHS02 GHS05 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labelling:**

Ethyl Alcohol, denatured

Methyl Alcohol

· **Hazard statements**

Highly flammable liquid and vapour.

May be corrosive to metals.

Harmful if swallowed.

Harmful if inhaled.

Causes skin irritation.

Causes serious eye irritation.

(Contd. on page 10)

Safety Data Sheet according to WHS Regulations

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: EHRlich'S HEMATOXYLIN

(Contd. of page 9)

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Suspected of causing genetic defects.

May cause cancer.

May cause damage to organs.

· Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Use explosion-proof electrical/ventilating/lighting equipment.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wear respiratory protection.

Wear protective gloves/protective clothing/eye protection/face protection.

Ground/bond container and receiving equipment.

Keep container tightly closed.

Use only non-sparking tools.

Keep only in original container.

Take precautionary measures against static discharge.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing should not be allowed out of the workplace.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Specific treatment (see on this label).

If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Wash contaminated clothing before reuse.

IF exposed or concerned: Get medical advice/attention.

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Rinse mouth.

In case of fire: Use for extinction: CO₂, powder or water spray.

Absorb spillage to prevent material damage.

Take off contaminated clothing and wash it before reuse.

Store locked up.

Store in corrosive resistant container /container with a corrosion resistant inner liner.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Directive 2012/18/EU

· Named dangerous substances - ANNEX I Methyl Alcohol

· Seveso category

E1 Hazardous to the Aquatic Environment

P5c FLAMMABLE LIQUIDS

· Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t

· Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

-AU-

(Contd. on page 11)

Safety Data Sheet

according to WHS Regulations

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: EHRlich'S HEMATOXYLIN

(Contd. of page 10)

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Met. Corr. 1: Corrosive to metals – Category 1

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Resp. Sens. 1B: Respiratory sensitisation – Category 1B

Skin Sens. 1B: Skin sensitisation – Category 1B

Muta. 2: Germ cell mutagenicity – Category 2

Carc. 1A: Carcinogenicity – Category 1A

STOT SE 2: Specific target organ toxicity (single exposure) – Category 2

AU

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2017

Reviewed on 04/14/2017

1 Identification

- **Product identifier**
- **Trade name:** EHRlich'S HEMATOXYLIN
- **Article number:** 26040-05, 26753-01, 26040-06
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 Electron Microscopy Sciences
 1560 Industry Road
 USA-Hatfield, PA 19440
 Tel: 215-412-8400 Fax: 215-412-8450
 email: sgkcck@aol.com
 www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**
 ChemTrec 1-800-424-9300 Contract CCN7661
 1-703-527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids - Category 2

H225 Highly flammable liquid and vapour.



GHS08 Health hazard

Respiratory Sensitizer - Category 1B

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Germ Cell Mutagenicity - Category 2

H341 Suspected of causing genetic defects.

Carcinogenicity - Category 1A

H350 May cause cancer.

Specific Target Organ Toxicity - Single Exposure - Category 2

H371 May cause damage to organs.



GHS05 Corrosion

Corrosive to Metals - Category 1

H290 May be corrosive to metals.



GHS07

Acute Toxicity (Oral) - Category 4

H302 Harmful if swallowed.

Acute Toxicity (Inhalation) - Category 4

H332 Harmful if inhaled.

Skin Irritation - Category 2

H315 Causes skin irritation.

Eye Irritation - Category 2A

H319 Causes serious eye irritation.

Skin Sensitizer - Category 1B

H317 May cause an allergic skin reaction.

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2017

Reviewed on 04/14/2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 1)

- **Label elements**

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS02 GHS05 GHS07 GHS08

- **Signal word** *Danger*

- **Hazard-determining components of labeling:**

Ethyl Alcohol, denatured

Methyl Alcohol

- **Hazard statements**

Highly flammable liquid and vapour.

May be corrosive to metals.

Harmful if swallowed or if inhaled.

Causes skin irritation.

Causes serious eye irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Suspected of causing genetic defects.

May cause cancer.

May cause damage to organs.

- **Precautionary statements**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Use explosion-proof [electrical/ventilating/lighting] equipment.

Do not breathe dust/fume/gas/mist/vapours/spray.

[In case of inadequate ventilation] wear respiratory protection.

Wear protective gloves/protective clothing/eye protection/face protection.

Ground and bond container and receiving equipment.

Keep container tightly closed.

Use non-sparking tools.

Keep only in original packaging.

Take actions to prevent static discharges.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing should not be allowed out of the workplace.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Specific treatment (see on this label).

If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF exposed or concerned: Get medical advice/attention.

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Rinse mouth.

In case of fire: Use for extinction: CO2, powder or water spray.

(Contd. on page 3)

CA

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2017

Reviewed on 04/14/2017

Trade name: EHRLICH'S HEMATOXYLIN

(Contd. of page 2)

Absorb spillage to prevent material-damage.

Take off contaminated clothing and wash it before reuse.

Store locked up.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Hazard description:**

· **WHMIS-symbols:**

B2 - Flammable liquid

D2A - Very toxic material causing other toxic effects



· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**

HEALTH	2	Health = 2
FIRE	3	Fire = 3
REACTIVITY	0	Reactivity = 0

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

56-81-5	glycerol	15-40% w/w
64-17-5	Ethyl Alcohol, denatured	10-30% w/w
64-19-7	Acetic Acid Glacial	1-5% w/w
67-56-1	Methyl Alcohol	1-5% w/w

4 First-aid measures

· **Description of first aid measures**

· **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Immediately call a doctor.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2017

Reviewed on 04/14/2017

Trade name: EHRlich'S HEMATOXYLIN

(Contd. of page 3)

- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect from heat.
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.

(Contd. on page 5)

CA

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2017

Reviewed on 04/14/2017

Trade name: **EHRlich's HEMATOXYLIN**

(Contd. of page 4)

· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

56-81-5 glycerol

EL Long-term value: 10* 3** mg/m³
*mist; **mist, respirable

EV Long-term value: 10 mg/m³

64-17-5 Ethyl Alcohol, denatured

EL Short-term value: 1000 ppm

EV Long-term value: 1,900 mg/m³, 1,000 ppm

64-19-7 Acetic Acid Glacial

EL Short-term value: 15 ppm

Long-term value: 10 ppm

EV Short-term value: 37 mg/m³, 15 ppm

Long-term value: 25 mg/m³, 10 ppm

67-56-1 Methyl Alcohol

EL Short-term value: 250 ppm

Long-term value: 200 ppm

Skin

EV Short-term value: 325 mg/m³, 250 ppm

Long-term value: 260 mg/m³, 200 ppm

Skin

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2017

Reviewed on 04/14/2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 5)

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:	Solution
Color:	Dark brown
· Odor:	Alcohol-like
· Odor threshold:	Not determined.

- **pH-value:** Not determined.

- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	78 °C

- **Flash point:** 17 °C

- **Flammability (solid, gaseous):** Not flammable.

- **Ignition temperature:** 400 °C

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Product is not selfigniting.

- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

- **Explosion limits:**

Lower:	0,9 Vol %
Upper:	15,0 Vol %

- **Vapor pressure at 20 °C:** 59 hPa

- **Density:** Not determined.

- **Relative density** Not determined.

- **Vapor density** Not determined.

- **Evaporation rate** Not determined.

- **Solubility in / Miscibility with**

Water: Fully miscible.

- **Partition coefficient (n-octanol/water):** Not determined.

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2017

Reviewed on 04/14/2017

Trade name: **EHRlich's HEMATOXYLIN**

(Contd. of page 6)

- **Viscosity:**
 - Dynamic:** Not determined.
 - Kinematic:** Not determined.
- **Solvent content:**
 - Organic solvents:** 66,0 %
- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· LD/LC50 values that are relevant for classification:		
---	--	--

67-56-1 Methyl Alcohol		
-------------------------------	--	--

Oral	LD50	5628 mg/kg (rat)
Dermal	LD50	15800 mg/kg (rabbit)

- **Primary irritant effect:**
 - on the skin:** Irritant to skin and mucous membranes.
 - on the eye:** Irritating effect.
- **Sensitization:**
 - Sensitization possible through inhalation.
 - Sensitization possible through skin contact.
- **Additional toxicological information:**
 - The product shows the following dangers according to internally approved calculation methods for preparations:
 - Harmful
 - Irritant

- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)		
---	--	--

64-17-5	Ethyl Alcohol, denatured	
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I

· NTP (National Toxicology Program)		
--	--	--

None of the ingredients is listed.		
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12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2017

Reviewed on 04/14/2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 7)

- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**
*Water hazard class 1 (Self-assessment): slightly hazardous for water
 Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
 Also poisonous for fish and plankton in water bodies.
 Very toxic for aquatic organisms*
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- | | |
|--|--|
| <ul style="list-style-type: none"> · UN-Number · DOT, TDG, IMDG, IATA | <p style="margin-left: 20px;">UN1987</p> |
| <ul style="list-style-type: none"> · UN proper shipping name · DOT · TDG · IMDG · IATA | <p style="margin-left: 20px;">Alcohols, n.o.s. (Ethanol, Methanol)
 1987 Alcohols, n.o.s. (Ethanol, Methanol), ENVIRONMENTALLY HAZARDOUS
 ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL)
 ALCOHOLS, N.O.S. (ETHANOL, METHANOL)</p> |
| <ul style="list-style-type: none"> · Transport hazard class(es) · DOT | <p style="margin-left: 20px;">3 Flammable liquids</p> |
| <ul style="list-style-type: none"> · Class · Label | <p style="margin-left: 20px;">3
3</p> |



(Contd. on page 9)

CA

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2017

Reviewed on 04/14/2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 8)

· **TDG (Transport dangerous goods):**

· **Class** 3 Flammable liquids
 · **Label** 3

· **IMDG, IATA**

· **Class** 3 Flammable liquids
 · **Label** 3

· **Packing group**
 · **DOT, TDG, IMDG, IATA** II

· **Environmental hazards:**
 · **Special marking (TDG):** Symbol (fish and tree)

· **Special precautions for user** Warning: Flammable liquids
 · **Danger code (Kemler):** 33
 · **EMS Number:** F-E,S-D
 · **Stowage Category** B

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

· **Transport/Additional information:**

· **DOT**
 · **Quantity limitations** On passenger aircraft/rail: 5 L
 On cargo aircraft only: 60 L

· **TDG**
 · **Excepted quantities (EQ)** Code: E2
 Maximum net quantity per inner packaging: 30 ml
 Maximum net quantity per outer packaging: 500 ml

· **IMDG**
 · **Limited quantities (LQ)** 1L
 · **Excepted quantities (EQ)** Code: E2
 Maximum net quantity per inner packaging: 30 ml
 Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":** UN 1987 ALCOHOLS, N.O.S. (ETHANOL, METHANOL), 3, II, ENVIRONMENTALLY HAZARDOUS

CA
(Contd. on page 10)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2017

Reviewed on 04/14/2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 9)

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

67-56-1 Methyl Alcohol

· **TSCA (Toxic Substances Control Act):**

56-81-5 glycerol

64-17-5 Ethyl Alcohol, denatured

64-19-7 Acetic Acid Glacial

67-56-1 Methyl Alcohol

517-28-2 haematoxylin

7681-55-2 Sodium iodate

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 0.1%)**

64-17-5 Ethyl Alcohol, denatured

· **Canadian Ingredient Disclosure list (limit 1%)**

64-19-7 Acetic Acid Glacial

67-56-1 Methyl Alcohol

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS02 GHS05 GHS07 GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

Ethyl Alcohol, denatured

Methyl Alcohol

· **Hazard statements**

Highly flammable liquid and vapour.

May be corrosive to metals.

Harmful if swallowed or if inhaled.

Causes skin irritation.

Causes serious eye irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Suspected of causing genetic defects.

May cause cancer.

May cause damage to organs.

· **Precautionary statements**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(Contd. on page 11)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2017

Reviewed on 04/14/2017

Trade name: EHRlich'S HEMATOXYLIN

(Contd. of page 10)

Use explosion-proof [electrical/ventilating/lighting] equipment.
 Do not breathe dust/fume/gas/mist/vapours/spray.
 [In case of inadequate ventilation] wear respiratory protection.
 Wear protective gloves/protective clothing/eye protection/face protection.
 Ground and bond container and receiving equipment.
 Keep container tightly closed.
 Use non-sparking tools.
 Keep only in original packaging.
 Take actions to prevent static discharges.
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Use only outdoors or in a well-ventilated area.
 Contaminated work clothing should not be allowed out of the workplace.
 Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing.
 Specific treatment (see on this label).
 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 IF exposed or concerned: Get medical advice/attention.
 If skin irritation or rash occurs: Get medical advice/attention.
 If eye irritation persists: Get medical advice/attention.
 Rinse mouth.
 In case of fire: Use for extinction: CO₂, powder or water spray.
 Absorb spillage to prevent material-damage.
 Take off contaminated clothing and wash it before reuse.
 Store locked up.
 Store in a well-ventilated place. Keep cool.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Date of preparation / last revision** 04/14/2017 / -

· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 NFPA: National Fire Protection Association (USA)
 HMIS: Hazardous Materials Identification System (USA)
 WHMIS: Workplace Hazardous Materials Information System (Canada)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.04.2017

Revision: 14.04.2017

1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** EHRlich'S HEMATOXYLIN
- **Article number:** 26040-05, 26753-01, 26040-06
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- **Further information obtainable from:** Product safety department
- **Emergency telephone number:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 Hazards identification

- **Classification of the substance or mixture**



flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



health hazard

Resp. Sens. 1B H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Muta. 2 H341 Suspected of causing genetic defects.

STOT SE 2 H371 May cause damage to organs.



corrosion

Met. Corr.1 H290 May be corrosive to metals.



environment

Aquatic Acute 1 H400 Very toxic to aquatic life.



Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 1)

Eye Irrit. 2A H319 Causes serious eye irritation.
 Skin Sens. 1B H317 May cause an allergic skin reaction.

· **Label elements**

· **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms**



· **Signal word** *Danger*

· **Hazard-determining components of labelling:**

Methyl Alcohol

· **Hazard statements**

Highly flammable liquid and vapour.

May be corrosive to metals.

Harmful if swallowed or if inhaled.

Causes skin irritation.

Causes serious eye irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Suspected of causing genetic defects.

May cause damage to organs.

Very toxic to aquatic life.

· **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Specific treatment (see on this label).

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterisation: Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

64-17-5	Ethyl Alcohol, denatured ⚠ Flam. Liq. 2, H225	25-50%
64-19-7	Acetic Acid Glacial ⚠ Flam. Liq. 3, H226; ⚠ Skin Corr. 1A, H314	2,5-10%
67-56-1	Methyl Alcohol ⚠ Flam. Liq. 2, H225; ⚠ STOT SE 1, H370; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; ⚠ Skin Corr. 3, H316; Eye Irrit. 2B, H320	≤ 2,5%

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: EHRlich'S HEMATOXYLIN

(Contd. of page 2)

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

4 First aid measures

- **Description of first aid measures**
- **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Call for a doctor immediately.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 3)

- Prevent formation of aerosols.
- **Information about fire - and explosion protection:**
 - Keep ignition sources away - Do not smoke.
 - Protect from heat.
 - Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
 - **Requirements to be met by storerooms and receptacles:** Store in a cool location.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:**
 - Keep container tightly sealed.
 - Store in cool, dry conditions in well sealed receptacles.
 - Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
 - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 - Keep away from foodstuffs, beverages and feed.
 - Immediately remove all soiled and contaminated clothing
 - Wash hands before breaks and at the end of work.
 - Avoid contact with the eyes and skin.
- **Respiratory protection:**
 - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**



Protective gloves

- The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
- Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
 - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**
 - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 4)

· **Eye protection:**

Tightly sealed goggles

9 Physical and chemical properties

· **Information on basic physical and chemical properties**· **General Information**· **Appearance:**

· Form:	Solution
· Colour:	Dark brown
· Odour:	Alcohol-like
· Odour threshold:	Not determined.

· **pH-value:** Not determined.· **Change in condition**

· Melting point/freezing point:	Undetermined.
· Initial boiling point and boiling range:	78 °C

· **Flash point:** 17 °C· **Flammability (solid, gas):** Not applicable.· **Ignition temperature:** 400 °C· **Decomposition temperature:** Not determined.· **Auto-ignition temperature:** Product is not selfigniting.· **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.· **Explosion limits:**

· Lower:	0,9 Vol %
· Upper:	15,0 Vol %

· **Vapour pressure at 20 °C:** 59 hPa· **Density:** Not determined.· **Relative density** Not determined.· **Vapour density** Not determined.· **Evaporation rate** Not determined.· **Solubility in / Miscibility with water:**

Fully miscible.

· **Partition coefficient: n-octanol/water:** Not determined.· **Viscosity:**· **Dynamic:** Not determined.· **Kinematic:** Not determined.· **Solvent content:**

· Organic solvents:	66,0 %
· VOC (EC)	33,80 %

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 5)

· **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**

· **LD/LC50 values relevant for classification:**

67-56-1 Methyl Alcohol

Oral	LD50	5628 mg/kg (rat)
Dermal	LD50	15800 mg/kg (rabbit)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Irritant to skin and mucous membranes.
- **Serious eye damage/irritation** Irritating effect.
- **Respiratory or skin sensitisation**
Sensitisation possible through inhalation.
Sensitisation possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Harmful
Irritant
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
Muta. 2

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Also poisonous for fish and plankton in water bodies.

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 6)

- *Very toxic for aquatic organisms*
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

· UN-Number · ADR, IMDG, IATA	UN1987
· UN proper shipping name · ADR · IMDG · IATA	1987 ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL), ENVIRONMENTALLY HAZARDOUS ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL) ALCOHOLS, N.O.S. (ETHANOL, METHANOL)
· Transport hazard class(es) · ADR	
 	
· Class · Label	3 Flammable liquids. 3
· IMDG, IATA	
	
· Class · Label	3 Flammable liquids. 3
· Packing group · ADR, IMDG, IATA	II
· Environmental hazards: · Special marking (ADR):	Symbol (fish and tree)
· Special precautions for user · Danger code (Kemler):	Warning: Flammable liquids. 33

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 7)

· EMS Number:	F-E,S-D
· Stowage Category	B
· Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· Transport category	2
· Tunnel restriction code	D/E
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1987 ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL), 3, II, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



- **Signal word** *Danger*
- **Hazard-determining components of labelling:**
Methyl Alcohol
- **Hazard statements**
Highly flammable liquid and vapour.
May be corrosive to metals.
Harmful if swallowed or if inhaled.
Causes skin irritation.
Causes serious eye irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
Suspected of causing genetic defects.
May cause damage to organs.
Very toxic to aquatic life.
- **Precautionary statements**
Keep away from heat/sparks/open flames/hot surfaces. No smoking.

(Contd. on page 9)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: EHRLICH'S HEMATOXYLIN

(Contd. of page 8)

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment (see on this label).

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I Methyl Alcohol**

· **Seveso category**

E1 Hazardous to the Aquatic Environment

P5c FLAMMABLE LIQUIDS

· **Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t**

· **Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t**

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H316 Causes mild skin irritation.

H320 Causes eye irritation.

H332 Harmful if inhaled.

H370 Causes damage to organs.

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Flam. Liq. 3: Flammable liquids – Category 3

Met. Corr. 1: Corrosive to metals – Category 1

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Skin Corr. 3: Skin corrosion/irritation – Category 3

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B

Resp. Sens. 1B: Respiratory sensitisation – Category 1B

Skin Sens. 1B: Skin sensitisation – Category 1B

Muta. 2: Germ cell mutagenicity – Category 2

STOT SE 1: Specific target organ toxicity (single exposure) – Category 1

STOT SE 2: Specific target organ toxicity (single exposure) – Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.04.2017

Revision: 14.04.2017

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name:** EHRlich'S HEMATOXYLIN
- **Article number:** 26040-05, 26753-01, 26040-06
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- **Further information obtainable from:** Product safety department
- **1.4 Emergency telephone number:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS08 health hazard

Resp. Sens. 1B H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Muta. 2 H341 Suspected of causing genetic defects.
STOT SE 2 H371 May cause damage to organs.



GHS05 corrosion

Met. Corr.1 H290 May be corrosive to metals.



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.
Acute Tox. 4 H332 Harmful if inhaled.

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: EHRLICH'S HEMATOXYLIN

(Contd. of page 1)

Skin Irrit. 2 *H315 Causes skin irritation.*
Skin Sens. 1B *H317 May cause an allergic skin reaction.*

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS02 GHS05 GHS07 GHS08 GHS09

Signal word *Danger***Hazard-determining components of labelling:***Methyl Alcohol***Hazard statements**

H225 *Highly flammable liquid and vapour.*
H290 *May be corrosive to metals.*
H302+H332 *Harmful if swallowed or if inhaled.*
H315 *Causes skin irritation.*
H334 *May cause allergy or asthma symptoms or breathing difficulties if inhaled.*
H317 *May cause an allergic skin reaction.*
H341 *Suspected of causing genetic defects.*
H371 *May cause damage to organs.*
H400 *Very toxic to aquatic life.*

Precautionary statements

P210 *Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.*
P241 *Use explosion-proof electrical/ventilating/lighting equipment.*
P303+P361+P353 *IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.*
P321 *Specific treatment (see on this label).*
P405 *Store locked up.*
P501 *Dispose of contents/container in accordance with local/regional/national/international regulations.*

2.3 Other hazards**Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures· **Description:** Mixture of substances listed below with nonhazardous additions.**Dangerous components:**

CAS: 56-81-5 EINECS: 200-289-5	glycerol substance with a Community workplace exposure limit	25-50%
CAS: 64-17-5 EINECS: 200-578-6	Ethyl Alcohol, denatured Flam. Liq. 2, H225	25-50%

(Contd. on page 3)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: EHRlich'S HEMATOXYLIN

(Contd. of page 2)

CAS: 64-19-7 EINECS: 200-580-7	Acetic Acid Glacial Flam. Liq. 3, H226; Skin Corr. 1A, H314	2.5-10%
CAS: 67-56-1 EINECS: 200-659-6	Methyl Alcohol Flam. Liq. 2, H225; STOT SE 1, H370; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	≤ 2.5%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Call for a doctor immediately.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**

· **Suitable extinguishing agents:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

· **5.3 Advice for firefighters**

· **Protective equipment:** Mouth respiratory protective device.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

· **6.2 Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

· **6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· **6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 3)

See Section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

· **Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.
Protect from heat.

Protect against electrostatic charges.

· **7.2 Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:** Store in a cool location.

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:**

Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.

· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

56-81-5 glycerol

WEL Long-term value: 10 mg/m³

64-17-5 Ethyl Alcohol, denatured

WEL Long-term value: 1920 mg/m³, 1000 ppm

67-56-1 Methyl Alcohol

WEL Short-term value: 333 mg/m³, 250 ppm

Long-term value: 266 mg/m³, 200 ppm

Sk

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 4)

· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**

Tightly sealed goggles

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**· **General Information**· **Appearance:**

Form:	Solution
Colour:	Dark brown
Odour:	Alcohol-like
Odour threshold:	Not determined.

· **pH-value:** Not determined.· **Change in condition**

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	78 °C

· **Flash point:** 17 °C· **Flammability (solid, gas):** Not applicable.· **Ignition temperature:** 400 °C· **Decomposition temperature:** Not determined.· **Auto-ignition temperature:** Product is not selfigniting.· **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.· **Explosion limits:**

Lower:	0.9 Vol %
Upper:	15.0 Vol %

· **Vapour pressure at 20 °C:** 59 hPa

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 5)

· Density:	Not determined.
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Fully miscible.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	66.0 %
VOC (EC)	33.80 %
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**
Harmful if swallowed or if inhaled.

· **LD/LC50 values relevant for classification:**

67-56-1 Methyl Alcohol

Oral	LD50	5628 mg/kg (rat)
Dermal	LD50	15800 mg/kg (rabbit)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes skin irritation.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation**
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity**
Suspected of causing genetic defects.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure**
May cause damage to organs.

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 6)

- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Also poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- | | |
|---------------------------------------|--|
| · 14.1 UN-Number | |
| · ADR, IMDG, IATA | UN1987 |
| · 14.2 UN proper shipping name | |
| · ADR | 1987 ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL), ENVIRONMENTALLY HAZARDOUS |
| · IMDG | ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL) |
| · IATA | ALCOHOLS, N.O.S. (ETHANOL, METHANOL) |

(Contd. on page 8)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 7)

· 14.3 Transport hazard class(es)

· ADR



· Class 3 Flammable liquids.
· Label 3

· IMDG, IATA



· Class 3 Flammable liquids.
· Label 3

· 14.4 Packing group

· ADR, IMDG, IATA II

· 14.5 Environmental hazards:

· Special marking (ADR): Symbol (fish and tree)

· 14.6 Special precautions for user

Warning: Flammable liquids.

· Danger code (Kemler):

33

· EMS Number:

F-E,S-D

· Stowage Category

B

· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

· Transport/Additional information:

· ADR

· Limited quantities (LQ)

1L

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· Transport category

2

· Tunnel restriction code

D/E

· IMDG

· Limited quantities (LQ)

1L

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· UN "Model Regulation":

UN 1987 ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL), 3, II, ENVIRONMENTALLY HAZARDOUS

GB

(Contd. on page 9)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.04.2017

Revision: 14.04.2017

Trade name: **EHRlich'S HEMATOXYLIN**

(Contd. of page 8)

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I Methyl Alcohol**
- **Seveso category**
 - E1 Hazardous to the Aquatic Environment*
 - P5c FLAMMABLE LIQUIDS*
- **Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t**
- **Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t**
- **REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3**
- **15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
 - H225 Highly flammable liquid and vapour.*
 - H226 Flammable liquid and vapour.*
 - H302 Harmful if swallowed.*
 - H312 Harmful in contact with skin.*
 - H314 Causes severe skin burns and eye damage.*
 - H315 Causes skin irritation.*
 - H332 Harmful if inhaled.*
 - H370 Causes damage to organs.*
- **Abbreviations and acronyms:**
 - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*
 - IMDG: International Maritime Code for Dangerous Goods*
 - IATA: International Air Transport Association*
 - GHS: Globally Harmonised System of Classification and Labelling of Chemicals*
 - EINECS: European Inventory of Existing Commercial Chemical Substances*
 - ELINCS: European List of Notified Chemical Substances*
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)*
 - VOC: Volatile Organic Compounds (USA, EU)*
 - LC50: Lethal concentration, 50 percent*
 - LD50: Lethal dose, 50 percent*
 - PBT: Persistent, Bioaccumulative and Toxic*
 - vPvB: very Persistent and very Bioaccumulative*
 - Flam. Liq. 2: Flammable liquids – Category 2*
 - Flam. Liq. 3: Flammable liquids – Category 3*
 - Met. Corr. 1: Corrosive to metals – Category 1*
 - Acute Tox. 4: Acute toxicity – Category 4*
 - Skin Corr. 1A: Skin corrosion/irritation – Category 1A*
 - Skin Irrit. 2: Skin corrosion/irritation – Category 2*
 - Resp. Sens. 1B: Respiratory sensitisation – Category 1B*
 - Skin Sens. 1B: Skin sensitisation – Category 1B*
 - Muta. 2: Germ cell mutagenicity – Category 2*
 - STOT SE 1: Specific target organ toxicity (single exposure) – Category 1*
 - STOT SE 2: Specific target organ toxicity (single exposure) – Category 2*
 - Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1*

化学品安全技术说明书

根据 GB/T 16483-2008, GB/T 17519-2013

打印日期 2017.04.14

在 2017.04.14 审核

1 化学品及企业标识

- 产品识别者
- 化学品中文(英文)名称, 化学品俗名或商品名: EHRlich'S HEMATOXYLIN
- 商品编号: 26040-05, 26753-01, 26040-06
- 相应纯物质或者混合物的相关下位用途及禁止用途 无相关详细资料。
- 原材料的应用/准备工作进行 实验室化学物
- 安全技术说明书内供应商详细信息
- 企业名称:
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- 可获取更多资料的部门: Product safety department
- 紧急联系电话号码:
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 危险性概述

· 紧急情况概述:

深棕色, 溶液, 高度易燃液体和蒸气。可能腐蚀金属。吞咽或吸入有害。造成皮肤刺激。造成严重眼刺激。吸入可能导致过敏或哮喘病症状或呼吸困难。可能导致皮肤过敏反应。怀疑会导致遗传性缺陷。可能对器官造成损害。对水生生物毒性极大。

· GHS危险性类别



火焰

易燃液体 第2类

H225 高度易燃液体和蒸气



健康危害

敏化(呼吸) 第1B类

H334 吸入可能导致过敏或哮喘病症状或呼吸困难

生殖细胞致突变性 第2类

H341 怀疑会导致遗传性缺陷

特定靶器官系统毒性(单次接触) 第2类 H371 可能对器官造成损害



腐蚀

金属腐蚀物 第1类

H290 可能腐蚀金属



环境

对水环境的危害(急性) 第1类

H400 对水生生物毒性极大



(在 2 页继续)

化学品安全技术说明书

根据 GB/T 16483-2008, GB/T 17519-2013

打印日期 2017.04.14

在 2017.04.14 审核

化学品中文(英文)名称, 化学品俗名或商品名 : EHRlich'S HEMATOXYLIN

(在 1 页继续)

急性毒性(经口) 第4类	H302 吞咽有害
急性毒性(吸入) 第4类	H332 吸入有害
皮肤腐蚀/刺激 第2类	H315 造成皮肤刺激
严重眼损伤/眼刺激 类别2A	H319 造成严重眼刺激
敏化(皮肤) 第1B类	H317 可能导致皮肤过敏反应

· 标签因素

· **GHS卷标元素** 本产品根据化学物质分类及标记全球协调制度(GHS)进行了分类及标记。

· 图示



GHS02 GHS05 GHS07 GHS08 GHS09

· **名称** 危险

· 标签上辨别危险的成份:

木精

· 危险字句

高度易燃液体和蒸气
可能腐蚀金属
吞咽或吸入有害
造成皮肤刺激
造成严重眼刺激
吸入可能导致过敏或哮喘病症状或呼吸困难
可能导致皮肤过敏反应
怀疑会导致遗传性缺陷
可能对器官造成损害
对水生生物毒性极大

· 警戒字句

· 预防措施

规定远离热源。禁止吸烟

· 事故响应

如皮肤(或头发)沾染:立即脱掉所有沾染的衣服。用水清洗皮肤/淋浴
如进入眼睛:用水小心冲洗几分钟。如戴隐形眼镜并可方便地取出,取出隐形眼镜。继续冲洗
具体治疗(见本标签上的)

· 安全储存

存放处须加锁

· 废弃处置

处置内装物/容器按照地方/区域/国家/国际规章

· 其他有害性

- PBT(残留性、生物浓缩性、毒性物质) 及 vPvB(高残留性、高生物浓缩性物质)评价结果
- PBT(残留性、生物浓缩性、毒性物质) 不适用的
- vPvB(高残留性、高生物浓缩性物质): 不适用的

3 成分/组成信息

· 混合物

· **描述:** 由以下含有无害添加剂的成分组成的混合物

(在 3 页继续)

化学品安全技术说明书

根据 GB/T 16483-2008, GB/T 17519-2013

打印日期 2017.04.14

在 2017.04.14 审核

化学品中文(英文)名称, 化学品俗名或商品名 : EHRlich'S HEMATOXYLIN

(在 2 页继续)

· 危险的成分:		
64-17-5	无水酒精 ⚠ 易燃液体 第2类, H225	25-50%
64-19-7	醋酸溶液 ⚠ 易燃液体 第3类, H226; ⚠ 皮肤腐蚀/刺激 第1A类, H314	2.5-10%
67-56-1	木精 ⚠ 易燃液体 第2类, H225; ⚠ 特定靶器官系统毒性 (单次接触) 第1类, H370; ⚠ 急性毒性(经口) 第4类, H302; ⚠ 急性毒性(经皮肤) 第4类, H312; ⚠ 急性毒性(吸入) 第4类, H332; 皮肤腐蚀/刺激 第3类, H316; 严重眼损伤/眼刺激 类别2B, H320	≤ 2.5%

4 急救措施

· 应急措施要领

· **总说明:** 中毒的症状可能会在几个小时以后才出现;因此在发生事故之后起码要有 48 小时的医疗观察.

· 吸入:

供给新鲜空气并且确保会叫医生.

万一病人不清醒时,请让病人侧躺以便移动.

· **皮肤接触:** 马上用水和肥皂进行彻底的冲洗.

· **眼睛接触:** 张开眼睛在流水下冲洗数分钟. 如果症状仍然持续,请咨询医生.

· **食入:** 马上召唤医生.

· 给医生的资料:

· **最重要的急慢性症状及其影响** 无相关详细资料.

· **需要及时的医疗处理及特别处理的症状** 无相关详细资料.

5 消防措施

· 灭火方法

· **灭火的方法和灭火剂:** 二氧化碳 (CO₂)、灭火粉末或洒水. 使用洒水或抗酒精泡沫灭火剂扑灭较大的火种.

· **特别危险性** 无相关详细资料.

· 特殊灭火方法

· **消防人员特殊的防护装备:** 口腔呼吸保护装置.

6 泄漏应急处理

· **保护措施** 带上保护仪器. 让未受到保护的人们远离.

· 环境保护措施:

如果渗入了水源或污水系统,请通知有关当局.

用大量的水进行稀释.

切勿让其进入下水道/水面或地下水.

· 密封及净化方法和材料:

吸收液体粘合原料 (沙粒、硅藻土、酸性粘合剂、通用粘合剂、锯屑).

根据第 13 条条款弃置受污染物.

确保有足够的通风装置.

· 参照其他部分

有关安全处理的资料请参阅第 7 节.

有关个人防护装备的资料请参阅第 8 节.

有关弃置的资料请参阅第 13 节.

CN

(在 4 页继续)

化学品安全技术说明书

根据 GB/T 16483-2008, GB/T 17519-2013

打印日期 2017.04.14

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(在 3 页继续)

7 操作处置与储存

- **操作处置**
- **储存**
确保工作间有良好的通风/排气装置。
防止气溶胶的形成。
- **有关火灾及防止爆炸的资料:**
远离火源 - 切勿吸烟。
防热。
防静电。
- **混合危险性等安全储存条件**
- **储存:**
- **储存库和容器须要达到的要求:** 储存在阴凉的位置。
- **有关使用一个普通的储存设施来储存的资料:** 不需要。
- **有关储存条件的更多资料:**
将容器密封。
储存密封的贮藏器内,并放在阴凉、干爽的位置。
免受接触热力和直接受阳光照射。
- **具体的最终用户** 无相关详细资料。

8 接触控制和个体防护

- **工程控制方法:** 没有进一步数据;见第 7 项。
- **控制变数**

· 在工作场需要监控的限值成分

64-17-5 无水酒精

PEL (TW)	PC-TWA: 1880 mg/m ³ , 1000 ppm
----------	---

64-19-7 醋酸溶液

OEL (CN)	PC-STEL: 20 mg/m ³
	PC-TWA: 10 mg/m ³
PEL (TW)	PC-TWA: 25 mg/m ³ , 10 ppm

67-56-1 木精

OEL (CN)	PC-STEL: 50 mg/m ³
	PC-TWA: 25 mg/m ³

- **额外的资料:** 制作期间有效的清单将作为基础来使用。

· 泄漏控制

· 个人防护设备:

· 一般保护和卫生措施:

- 远离食品、饮料和饲料。
- 立即除去所有的不洁的和被污染的衣服。
- 在休息之前和工作完毕后请清洗双手。
- 避免和眼睛及皮肤接触。

· 呼吸系统防护:

- 如果曾短暂接触或在低污染的情况下,请使用呼吸过滤装置。如果曾深入或较长时间接触,请使用独立的呼吸保护装置。

(在 5 页继续)

CN

化学品安全技术说明书

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(在 4 页继续)

· 手防护:



保护手套

手套的物料必须是不渗透性的, 且能抵抗该产品/物质/添加剂。
基于缺乏测试, 对于产品/制剂/化学混合物, 并不会提供手套材料的建议
选择手套材料时, 请注意材料的渗透时间, 渗透率和降解参数

· 手套材料

选择合适的手套不单取决于材料, 亦取决于质量特征, 以及来自哪一间生产厂家, 因为该产品是由很多材料配制而成, 手套材料的抵抗力并不可预计, 所以, 必须在使用之前进行检查

· **渗入手套材料的时间** 请向劳保手套生产厂家获取准确的破裂时间并观察实际的破裂时间

· 眼睛防护:



密封的护目镜

9 理化特性

· 有关基本物理及化学特性的信息

· 一般说明

· 外观:

· 形状: 溶液
· 颜色: 深棕色
· 气味: 类似酒精
· 嗅觉阈限: 未决定.

· pH值: 未决定.

· 条件的更改

· 熔点: 未确定的
· 沸点/初沸点和沸程: 78 °C

· 闪点: 17 °C

· 可燃性(固体、气体): 不适用的

· 点火温度: 400 °C

· 分解温度: 未决定.

· 自燃温度: 该产品是不自燃的

· 爆炸的危险性: 该产品并非爆炸性的然而有可能形成可爆炸性的空气/蒸汽混合物

· 爆炸极限:

· 较低: 0.9 Vol %
· 较高: 15.0 Vol %

· 蒸气压 在 20 °C: 59 hPa

· 密度: 未决定的

· 相对密度: 未决定.

· 蒸气密度: 未决定.

· 蒸发速率: 未决定.

(在 6 页继续)

化学品安全技术说明书

根据 GB/T 16483-2008, GB/T 17519-2013

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在 2017.04.14 审核

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(在 5 页继续)

- **溶解性**
水: 完全可拌和的
- **n-辛醇/水分配系数:** 未决定.
- **黏性:**
动态: 未决定.
运动学的: 未决定.
- **溶剂成份:**
有机溶剂: 66.0 %
- **其他信息** 无相关详细资料。

10 稳定性和反应性

- **反应性** 无相关详细资料。
- **稳定性**
- **热分解/要避免的情况:** 如果遵照规格使用则不会分解.
- **有害反应可能性** 未有已知的危险反应.
- **应避免的条件** 无相关详细资料。
- **不相容的物质:** 无相关详细资料。
- **危险的分解产物:** 未知有危险的分解产品.

11 毒理学信息

- **对毒性学影响的信息**
- **急性毒性:**

- **与分类相关的 LD/LC50 值:**

67-56-1 木精

口腔	LD50	5628 mg/kg (rat)
皮肤	LD50	15800 mg/kg (rabbit)

- **主要的刺激性影响:**
- **皮肤:** 刺激皮肤和粘膜.
- **在眼睛上面:** 刺激的影响.
- **致敏作用:**
通过吸入可能造成敏化作用.
通过皮肤接触可能造成敏化作用.
- **更多毒物的资料:**
根据有关配制的一般欧盟分类指南的计算方法(刊印在最新版本),该产品显示以下的危险:
有害的
刺激性的
- **对以下组别可能产生影响的数据:**
- **CMR作用 (致癌、导致基因突变、对生殖系统有害)**
生殖细胞致突变性 第2类

12 生态学信息

- **生态毒性**
- **水生毒性:** 无相关详细资料。
- **持久性和降解性** 无相关详细资料。

(在 7 页继续)

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(在 6 页继续)

- **环境系统习性:**
- **潜在的生物累积性** 无相关详细资料。
- **土壤内移动性** 无相关详细资料。
- **生态毒性的影响:**
- **备注:** 对鱼类有剧毒
- **额外的生态学资料:**
- **总括注解:**
水危害级别 1(德国规例) (通过名单进行自我评估): 对水是稍微危害的
不要让未稀释或大量的产品接触地下水、水道或者污水系统。
对水体中的鱼和浮游生物也有毒害。
对水中的有机物有剧毒。
- **PBT(残留性、生物浓缩性、毒性物质) 及 vPvB(高残留性、高生物浓缩性物质)评价结果**
- **PBT(残留性、生物浓缩性、毒性物质)** 不适用的
- **vPvB(高残留性、高生物浓缩性物质):** 不适用的
- **其他副作用** 无相关详细资料。

13 废弃处置

- **废弃处置方法**
- **建议:** 不能将该产品和家居垃圾一起丢弃. 不要让该产品接触污水系统.
- **受污染的容器和包装:**
- **建议:** 必须根据官方的规章来丢弃.
- **建议的清洗剂:** 如有必要请使用水及清洁剂进行清洁.

14 运输信息

- | | |
|--------------------------|---|
| · 联合国危险货物编号(UN号) | |
| · ADR, IMDG, IATA | UN1987 |
| · UN适当装船名 | |
| · ADR | 1987 醇类, 未另作规定的 (乙醇, 甲醇), ENVIRONMENTALLY HAZARDOUS |
| · IMDG | ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL) |
| · IATA | ALCOHOLS, N.O.S. (ETHANOL, METHANOL) |
| · 运输危险等级 | |
| · ADR | |
| |  |
| · 级别 | 3 易燃液体 |
| · 标签 | 3 |
| · IMDG, IATA | |
| |  |
| · Class | 3 易燃液体 |

(在 8 页继续)

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(在 7 页继续)

· Label	3
· 包装组别	
· ADR, IMDG, IATA	II
· 危害环境: · 特别标记 (ADR):	象征符号 (鱼和树)
· 用户特别预防措施	警告: 易燃液体
· 危险编码:	33
· EMS 号码:	F-E,S-D
· Stowage Category	B
· MARPOL73/78(针对船舶引起的海洋污染预防协议)附件书2及根据IBC Code(国际装船货物编码)的大量运送	不适用的
· 运输/额外的资料:	
· ADR · Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "标准规定":	UN 1987 醇类, 未另作规定的 (乙醇, 甲醇), 3, II, ENVIRONMENTALLY HAZARDOUS

15 法规信息

- 对相应纯物质或者混合物的安全、保健及环境法规/法律
- 新化学物质环境管理办法

- 中国现有化学物质名录

列出所有成分

- GHS卷标元素 本产品根据化学物质分类及标记全球协调制度(GHS)进行了分类及标记。

- 图示



GHS02 GHS05 GHS07 GHS08 GHS09

- 名称 危险

- 标签上辨别危险的成份:

木精

- 危险字句

高度易燃液体和蒸气

可能腐蚀金属

吞咽或吸入有害

造成皮肤刺激

(在 9 页继续)

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(在 8 页继续)

造成严重眼刺激
 吸入可能导致过敏或哮喘病症状或呼吸困难
 可能导致皮肤过敏反应
 怀疑会导致遗传性缺陷
 可能对器官造成损害
 对水生生物毒性极大

· **警戒字句**

· **预防措施**

规定远离热源。禁止吸烟

· **事故响应**

如皮肤(或头发)沾染:立即脱掉所有沾染的衣服。用水清洗皮肤/淋浴
 如进入眼睛:用水小心冲洗几分钟。如戴隐形眼镜并可方便地取出,取出隐形眼镜。继续冲洗
 具体治疗(见本标签上的)

· **安全储存**

存放处须加锁

· **废弃处置**

处置内装物/容器按照地方/区域/国家/国际规章

· **化学物质安全性评价:** 尚未进行化学物质安全性评价

16 其他信息

该资料是基于我们目前的知识。然而,这并不构成对任何特定产品特性的担保并且不建立一个法律上有效的合同关系。

· **缩写:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: 持久性生物累积性有毒物质

vPvB: very Persistent and very Bioaccumulative

易燃液体 第2类: Flammable liquids – Category 2

易燃液体 第3类: Flammable liquids – Category 3

金属腐蚀物 第1类: Corrosive to metals – Category 1

急性毒性(经口) 第4类: Acute toxicity – Category 4

皮肤腐蚀/刺激 第1A类: Skin corrosion/irritation – Category 1A

皮肤腐蚀/刺激 第2类: Skin corrosion/irritation – Category 2

皮肤腐蚀/刺激 第3类: Skin corrosion/irritation – Category 3

严重眼损伤/眼刺激 类别2A: Serious eye damage/eye irritation – Category 2A

严重眼损伤/眼刺激 类别2B: Serious eye damage/eye irritation – Category 2B

敏化(呼吸) 第1B类: Respiratory sensitisation – Category 1B

敏化(皮肤) 第1B类: Skin sensitisation – Category 1B

生殖细胞致突变性 第2类: Germ cell mutagenicity – Category 2

特定靶器官系统毒性(单次接触) 第1类: Specific target organ toxicity (single exposure) – Category 1

特定靶器官系统毒性(单次接触) 第2类: Specific target organ toxicity (single exposure) – Category 2

对水环境的危害(急性) 第1类: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 14.04.2017

Herziening van: 14.04.2017

RUBRIEK 1: Identificatie van de stof of het mengsel en van de vennootschap/onderneming

- **1.1 Productidentificatie**
- **Handelsnaam:** EHRlich'S HEMATOXYLIN
- **Artikelnummer:** 26040-05, 26753-01, 26040-06
- **1.2 Relevant geïdentificeerd gebruik van de stof of het mengsel en ontraden gebruik**
Geen verdere relevante informatie verkrijgbaar.
- **Toepassing van de stof / van de bereiding** Laboratoriumchemicaliën
- **1.3 Details betreffende de verstrekker van het veiligheidsinformatieblad**
- **Fabrikant/leverancier:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- **Aurion**
Binnenhaven 5
6709 PD Wageningen
The Netherlands
Tel: 31 317 415094
Fax: 31 317 415955
email: info@aurion.nl
- **Inlichtinggevendende sector:** Product safety department
- **1.4 Telefoonnummer voor noodgevallen:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

RUBRIEK 2: Identificatie van de gevaren

- **2.1 Indeling van de stof of het mengsel**
- **Indeling overeenkomstig Verordening (EG) nr. 1272/2008**



GHS02 vlam

Flam. Liq. 2 H225 Licht ontvlambare vloeistof en damp.



GHS08 gezondheidsgevaar

Resp. Sens. 1B H334 Kan bij inademing allergie- of astmasymptomen of ademhalingsmoeilijkheden veroorzaken.

Muta. 2 H341 Verdacht van het veroorzaken van genetische schade.

STOT SE 2 H371 Kan schade aan organen veroorzaken.



GHS05 corrosie

Met. Corr.1 H290 Kan bijtend zijn voor metalen.

(Vervolg op blz. 2)

Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 14.04.2017

Herziening van: 14.04.2017

Handelsnaam: EHRlich'S HEMATOXYLIN

(Vervolg van blz. 1)



GHS09 milieu

Aquatic Acute 1 H400 Zeer giftig voor in het water levende organismen.



GHS07

Acute Tox. 4 H302 Schadelijk bij inslikken.

Acute Tox. 4 H332 Schadelijk bij inademing.

Skin Irrit. 2 H315 Veroorzaakt huidirritatie.

Skin Sens. 1B H317 Kan een allergische huidreactie veroorzaken.

· 2.2 Etiketteringselementen

· Etikettering overeenkomstig Verordening (EG) nr. 1272/2008

Het product is geclassificeerd en geëtiketteerd volgens de CLP-verordening.

· Gevarenpictogrammen



GHS02



GHS05



GHS07



GHS08



GHS09

· Signaalwoord Gevaar

· Gevaaraanduidende componenten voor de etikettering:

methanol

· Gevarenaanduidingen

H225 Licht ontvlambare vloeistof en damp.

H290 Kan bijtend zijn voor metalen.

H302+H332 Schadelijk bij inslikken en bij inademing.

H315 Veroorzaakt huidirritatie.

H334 Kan bij inademing allergie- of astmasymptomen of ademhalingsmoeilijkheden veroorzaken.

H317 Kan een allergische huidreactie veroorzaken.

H341 Verdacht van het veroorzaken van genetische schade.

H371 Kan schade aan organen veroorzaken.

H400 Zeer giftig voor in het water levende organismen.

· Veiligheidsaanbevelingen

P210 Verwijderd houden van warmte, hete oppervlakken, vonken, open vuur en andere ontstekingsbronnen. Niet roken.

P241 Explosieveilige elektrische/ventilatie-/verlichtings- apparatuur gebruiken.

P303+P361+P353 BIJ CONTACT MET DE HUID (of het haar): verontreinigde kleding onmiddellijk uittrekken. Huid met water afspoelen/afdouchen.

P321 Specifieke behandeling vereist (zie op dit etiket).

P405 Achter slot bewaren.

P501 De inhoud en de verpakking verwerken volgens de plaatselijke/regionale/nationale/internationale voorschriften.

· 2.3 Andere gevaren

· Resultaten van PBT- en zPzB-beoordeling

· **PBT:** Niet bruikbaar.

· **zPzB:** Niet bruikbaar.

NL

(Vervolg op blz. 3)

Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 14.04.2017

Herziening van: 14.04.2017

Handelsnaam: EHRlich'S HEMATOXYLIN

(Vervolg van blz. 2)

RUBRIEK 3: Samenstelling en informatie over de bestanddelen

- **3.2 Chemische karakterisering: Mengsels**
- **Beschrijving:** Mengsel van na elkaar aangevoerde stoffen met ongevaarlijke bijmengingen.

- **Gevaarlijke inhoudstoffen:**

CAS: 64-17-5 EINECS: 200-578-6	ethanol Flam. Liq. 2, H225	25-50%
CAS: 64-19-7 EINECS: 200-580-7	azijnzuur Flam. Liq. 3, H226; Skin Corr. 1A, H314	2,5-10%
CAS: 67-56-1 EINECS: 200-659-6	methanol Flam. Liq. 2, H225; STOT SE 1, H370; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	≤ 2,5%

- **Aanvullende gegevens:**

De woordelijke inhoud van de opgegeven aanwijzingen inzake de mogelijke gevaren is te vinden in hoofdstuk 16.

RUBRIEK 4: Eerstehulpmaatregelen

- **4.1 Beschrijving van de eerstehulpmaatregelen**
- **Algemene informatie:**
Het is mogelijk dat vergiftigingssymptomen pas na vele uren optreden. Om deze reden is medische controle gedurende minstens 48 uur na een ongeval noodzakelijk.
- **Na het inademen:**
Veel verse lucht toedienen en voor alle zekerheid een arts raadplegen.
Bij bewusteloosheid ligging en vervoer in stabiele zijligging.
- **Na huidcontact:** Onmiddellijk met water en zeep afwassen en goed naspoelen.
- **Na oogcontact:**
De ogen gedurende verscheidene minuten onder stromend water afspoelen terwijl de oogspleet geopend blijft. Bij aanhoudende klachten een dokter raadplegen.
- **Na inslikken:** Onmiddellijk arts raadplegen.
- **4.2 Belangrijkste acute en uitgestelde symptomen en effecten** Geen verdere relevante informatie verkrijgbaar.
- **4.3 Vermelding van de vereiste onmiddellijke medische verzorging en speciale behandeling**
Geen verdere relevante informatie verkrijgbaar.

RUBRIEK 5: Brandbestrijdingsmaatregelen

- **5.1 Blusmiddelen**
- **Geschikte blusmiddelen:**
CO₂, bluspoeder of waterstraal. Grotere brand met waterstraal bestrijden of met schuim, dat tegen alcohol bestand is.
- **5.2 Speciale gevaren die door de stof of het mengsel worden veroorzaakt**
Geen verdere relevante informatie verkrijgbaar.
- **5.3 Advies voor brandweerlieden**
- **Speciale beschermende kleding:** Ademhalingstoestel aantrekken.

RUBRIEK 6: Maatregelen bij het accidenteel vrijkomen van de stof of het mengsel

- **6.1 Persoonlijke voorzorgsmaatregelen, beschermde uitrusting en noodprocedures**
Beschermende kleding aantrekken. Niet beschermde personen op afstand houden.
- **6.2 Milieuvoorzorgsmaatregelen:**
Bij indringen in afvalwater of riolering moet de bevoegde instantie gewaarschuwd worden.

(Vervolg op blz. 4)

Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 14.04.2017

Herziening van: 14.04.2017

Handelsnaam: EHRlich'S HEMATOXYLIN

(Vervolg van blz. 3)

Met veel water verdunnen.

Niet in de riolering/het oppervlaktewater/het grondwater laten terecht komen.

· **6.3 InsluTINGS- en reinigingsmethoden en -materiaal:**

Met vloeistofbindend materiaal (zand, bergmeel, zuurbinder, universele binder, zaagmeel) opnemen.

Besmet materiaal zoals afval volgens punt 13 verwijderen.

Voor voldoende ventilatie zorgen.

· **6.4 Verwijzing naar andere rubrieken**

Informatie inzake veilig gebruik - zie hoofdstuk 7.

Informatie inzake persoonlijke beschermingsuitrusting - zie hoofdstuk 8.

Informatie inzake berging - zie hoofdstuk 13.

RUBRIEK 7: Hantering en opslag

· **7.1 Voorzorgsmaatregelen voor het veilig hanteren van de stof of het mengsel**

Voor goede ventilatie/afzuiging op de werkplaatsen zorgen.

Aërosolvorming vermijden.

· **Informatie m.b.t. brand- en ontploffingsgevaar:**

Onststekingsbronnen op afstand houden - niet roken.

Beschermen tegen hitte.

Maatregelen treffen tegen ontlading van statische elektriciteit.

· **7.2 Voorwaarden voor een veilige opslag, met inbegrip van incompatibele producten**

· **Opslag:**

· **Eisen ten opzichte van opslagruimte en tanks:** Op een koele plaats bewaren.

· **Informatie m.b.t. gezamenlijke opslag:** Niet noodzakelijk.

· **Verdere inlichtingen over eisen m.b.t. de opslag:**

Tanks ondoordringbaar gesloten houden.

Koel en droog bewaren in goed gesloten vaten.

Tegen hitte en directe zonnestralen beschermen.

· **7.3 Specifiek eindgebruik** Geen verdere relevante informatie verkrijgbaar.

RUBRIEK 8: Maatregelen ter beheersing van blootstelling/persoonlijke bescherming

· **Aanvullende gegevens m.b.t. de inrichting van technische installaties:** Geen aanvullende gegevens. Zie 7.

· **8.1 Controleparameters**

· **Bestanddelen met grenswaarden die m.b.t. de werkruimte in acht genomen moeten worden:**

64-17-5 ethanol

WGW | Korte termijn waarde: 1900 mg/m³, 990 ppm

| Lange termijn waarde: 260 mg/m³, 35 ppm

64-19-7 azijnzuur

WGW | Lange termijn waarde: 25 mg/m³, 10 ppm

67-56-1 methanol

WGW | Lange termijn waarde: 133 mg/m³, 100 ppm

· **Aanvullende gegevens:** Als basis dienden lijsten die bij opstelling geldig waren.

· **8.2 Maatregelen ter beheersing van blootstelling**

· **Persoonlijke beschermingsvoorzieningen:**

· **Algemene beschermings- en gezondheidsmaatregelen:**

Verwijderd houden van eet- en drinkwaren.

Verontreinigde kleding onmiddellijk uittrekken.

Vóór de pauze en aan het einde van werktijd handen wassen.

(Vervolg op blz. 5)

Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 14.04.2017

Herziening van: 14.04.2017

Handelsnaam: EHRlich'S HEMATOXYLIN

(Vervolg van blz. 4)

Aanraking met de ogen en de huid vermijden.

· **Ademhalingsbescherming:**

Bij korte of geringe belasting ademfiltertoestel; bij intensieve resp. langdurige expositie een van de omringende lucht onafhankelijk ademhalingsstoestel gebruiken.

· **Handbescherming:**



Veiligheidshandschoenen

Het handschoenmateriaal moet ondoorlatend en bestand zijn tegen het product / de stof / de bereiding.

Op grond van falende testen kan geen aanbeveling voor handschoenmateriaal voor het product / de bereiding / het chemicaliënmengsel afgegeven worden.

Kies handschoenmateriaal rekening houdend met de penetratietijden, de permeatiegraden en de degradatie.

· **Handschoenmateriaal**

De keuze van een geschikte handschoen is niet alleen afhankelijk van het materiaal, maar ook van andere kwaliteitskenmerken en verschilt van fabrikant tot fabrikant. Aangezien het product uit meerdere stoffen is samengesteld, is de duurzaamheid van de handschoenmaterialen niet vooraf berekenbaar en moet derhalve vóór het gebruik worden getest.

· **Doordringingstijd van het handschoenmateriaal**

De precieze penetratietijd kunt u te weten komen bij de handschoenfabrikant; houd er rekening mee.

· **Oogbescherming:**



Nauw aansluitende veiligheidsbril

RUBRIEK 9: Fysische en chemische eigenschappen

· **9.1 Informatie over fysische en chemische basiseigenschappen**

· **Algemene gegevens**

· **Voorkomen:**

Vorm:	Oplossing
Kleur:	Donkerbruin
Geur:	Alcoholachtig
Geurdrempelwaarde:	Niet bepaald.

· **pH-waarde:** Niet bepaald.

· **Toestandsverandering**

Smelt-/vriespunt:	Niet bepaald.
Beginkookpunt en kooktraject:	78 °C

· **Vlampunt:** 17 °C

· **Ontvlambaarheid (vast, gas):** Niet bruikbaar.

· **Ontstekingstemperatuur:** 400 °C

· **Ontledingstemperatuur:** Niet bepaald.

· **Zelfontbrandingstemperatuur:** Het produkt ontbrandt niet uit zichzelf.

· **Ontploffingseigenschappen:** Het produkt is niet ontploffingsgevaarlijk, maar de vorming van ontploffingsgevaarlijke damp-/luchtmengsels is mogelijk.

(Vervolg op blz. 6)

Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 14.04.2017

Herziening van: 14.04.2017

Handelsnaam: EHRlich'S HEMATOXYLIN

(Vervolg van blz. 5)

· Ontploffingsgrenzen:	
Onderste:	0,9 Vol %
Bovenste:	15,0 Vol %
· Dampspanning bij 20 °C:	59 hPa
· Dichtheid:	Niet bepaald.
· Relatieve dichtheid	Niet bepaald.
· Dampdichtheid	Niet bepaald.
· Verdampingssnelheid	Niet bepaald.
· Oplosbaarheid in/mengbaarheid met Water:	Volledig mengbaar.
· Verdelingscoëfficiënt: n-octanol/water:	Niet bepaald.
· Viscositeit	
Dynamisch:	Niet bepaald.
Kinematisch:	Niet bepaald.
· Oplosmiddelgehalte:	
Organisch oplosmiddel:	66,0 %
VOC (EG)	33,80 %
· 9.2 Overige informatie	Geen verdere relevante informatie verkrijgbaar.

RUBRIEK 10: Stabiliteit en reactiviteit

- **10.1 Reactiviteit** Geen verdere relevante informatie verkrijgbaar.
- **10.2 Chemische stabiliteit**
- **Thermische afbraak / te vermijden omstandigheden:** Geen afbraak bij gebruik volgens voorschrift.
- **10.3 Mogelijke gevaarlijke reacties** Geen gevaarlijke reacties bekend.
- **10.4 Te vermijden omstandigheden** Geen verdere relevante informatie verkrijgbaar.
- **10.5 Chemisch op elkaar inwerkende materialen:** Geen verdere relevante informatie verkrijgbaar.
- **10.6 Gevaarlijke ontledingsproducten:** Geen gevaarlijke ontbindingsproducten bekend.

RUBRIEK 11: Toxicologische informatie

- **11.1 Informatie over toxicologische effecten**
- **Acute toxiciteit**
Schadelijk bij inslikken en bij inademing.

Indelingsrelevantie LD/LC50-waarden:

67-56-1 methanol

Oraal	LD50	5628 mg/kg (rat)
Dermaal	LD50	15800 mg/kg (rabbit)

- **Primaire aandoening:**
- **Huidcorrosie/-irritatie**
Veroorzaakt huidirritatie.
- **Ernstig oogletsel/oogirritatie** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Sensibilisatie van de luchtwegen/de huid**
Kan bij inademing allergie- of astmasymptomen of ademhalingsmoeilijkheden veroorzaken.
Kan een allergische huidreactie veroorzaken.

(Vervolg op blz. 7)

Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 14.04.2017

Herziening van: 14.04.2017

Handelsnaam: EHRlich'S HEMATOXYLIN

(Vervolg van blz. 6)

- **CMR-effecten (kankerverwekkendheid, mutageniteit en giftigheid voor de voortplanting)**
- **Mutageniteit in geslachtscellen**
Verdacht van het veroorzaken van genetische schade.
- **Kankerverwekkendheid** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Giftigheid voor de voortplanting** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **STOT bij eenmalige blootstelling**
Kan schade aan organen veroorzaken.
- **STOT bij herhaalde blootstelling** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Gevaar bij inademing** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.

RUBRIEK 12: Ecologische informatie

- **12.1 Toxiciteit**
- **Aquatische toxiciteit:** Geen verdere relevante informatie verkrijgbaar.
- **12.2 Persistentie en afbreekbaarheid** Geen verdere relevante informatie verkrijgbaar.
- **12.3 Bioaccumulatie** Geen verdere relevante informatie verkrijgbaar.
- **12.4 Mobiliteit in de bodem** Geen verdere relevante informatie verkrijgbaar.
- **Ecotoxische effecten:**
- **Opmerking:** Zeer giftig voor vissen.
- **Verdere ecologische informatie:**
- **Algemene informatie:**
Waterbezwaarlijkheid (NL): A(4)
Gevaar voor water klasse 1 (D) (Zelfclassificatie): gevaar voor water klein
Niet onverdund of in grote hoeveelheden lozen in grondwater, in oppervlaktewater of in de riolering.
In oppervlaktewater ook giftig voor vissen en plankton.
zeer giftig voor in het water levende organismen
- **12.5 Resultaten van PBT- en zPzB-beoordeling**
- **PBT:** Niet bruikbaar.
- **zPzB:** Niet bruikbaar.
- **12.6 Andere schadelijke effecten** Geen verdere relevante informatie verkrijgbaar.

RUBRIEK 13: Instructies voor verwijdering

- **13.1 Afvalverwerkingsmethoden**
- **Aanbeveling:** Mag niet tesamen met huisvuil gestort worden of in de riolering terecht komen.
- **Niet gereinigde verpakkingen:**
- **Aanbeveling:** Afvalverwijdering volgens overheidsbepalingen.
- **Aanbevolen reinigingsmiddel:** Water, eventueel met toevoeging van reinigingsmiddelen.

RUBRIEK 14: Informatie met betrekking tot het vervoer

- **14.1 VN-nummer**
- **ADR, IMDG, IATA** UNI987
- **14.2 Juiste ladingnaam overeenkomstig de modelreglementen van de VN**
- **ADR** 1987 ALCOHOLEN, N.E.G. (ETHANOL (ETHYLALCOHOL), METHANOL), MILIEUGEVAARLIJK ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL)
- **IMDG**
- **IATA** ALCOHOLS, N.O.S. (ETHANOL, METHANOL)

(Vervolg op blz. 8)

Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 14.04.2017

Herziening van: 14.04.2017

Handelsnaam: EHRlich'S HEMATOXYLIN

(Vervolg van blz. 7)

· 14.3 Transportgevarenklasse(n)
· ADR


· **klasse** 3 Brandbare vloeistoffen
 · **Etiket** 3

· IMDG, IATA


· **Class** 3 Brandbare vloeistoffen
 · **Label** 3

· 14.4 Verpakkingsgroep:

· **ADR, IMDG, IATA** II

· 14.5 Milieugevaren:

· **Bijzondere kenmerking (ADR):** Symbool (vis en boom)

· 14.6 Bijzondere voorzorgen voor de gebruiker

Waarschuwing: Brandbare vloeistoffen

· Kemler-getal:

33

· EMS-nummer:

F-E,S-D

· Stowage Category

B

· 14.7 Vervoer in bulk overeenkomstig bijlage II bij Marpol en de IBC-code

Niet bruikbaar.

· Transport/verdere gegevens:
· ADR
· Beperkte hoeveelheden (LQ)

1L

· Uitgezonderde hoeveelheden (EQ)

Code: E2

Grootste netto hoeveelheid per binnenverpakking: 30 ml

Grootste netto hoeveelheid per buitenverpakking: 500 ml

· Vervoerscategorie

2

· Tunnelbeperkingscode

D/E

· IMDG
· Limited quantities (LQ)

1L

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· VN "Model Regulation":

UN 1987 ALCOHOLEN, N.E.G. (ETHANOL (ETHYLALCOHOL), METHANOL), 3, II, MILIEUGEVAARLIJK

NL

(Vervolg op blz. 9)

Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 14.04.2017

Herziening van: 14.04.2017

Handelsnaam: EHRlich'S HEMATOXYLIN

(Vervolg van blz. 8)

RUBRIEK 15: Regelgeving

· 15.1 Specifieke veiligheids-, gezondheids- en milieureglementen en -wetgeving voor de stof of het mengsel

· SZW-lijst van kankerverwekkende stoffen

64-17-5 ethanol

· SZW-lijst van mutagene stoffen

geen der bestanddelen staat op de lijst.

· NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Vruchtbaarheid

64-17-5 ethanol

IA

· NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Ontwikkeling

64-17-5 ethanol

IA

67-56-1 methanol

IB

· NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Borstvoeding

64-17-5 ethanol

x

· Richtlijn 2012/18/EU

· Gevaarlijke stoffen die met naam genoemd worden - BIJLAGE I methanol

· Seveso-categorie

E1 Gevaar voor het aquatisch milieu

P5c ONTVLAMBARE VLOEISTOFFEN

· Drempelwaarde (ton) voor toepassing van voorschriften voor lagedrempelinrichtingen 100 t

· Drempelwaarde (ton) voor toepassing van voorschriften voor hogedrempelinrichtingen 200 t

· Verordening (EG) nr. 1907/2006 BIJLAGE XVII Beperkingsvoorwaarden: 3

· Nationale voorschriften:

· Gevaarklasse v. water: Waterbezwaarlijkheid (NL): A(4)

· 15.2 Chemischeveiligheidsbeoordeling: Een chemische veiligheidsbeoordeling is niet uitgevoerd.

RUBRIEK 16: Overige informatie

Deze gegevens zijn gebaseerd op de huidige stand van onze kennis. Zij beschrijven echter geen garantie van produkteigenschappen en vestigen geen contractuele rechtsbetrekking.

· Relevante zinnen

H225 Licht ontvlambare vloeistof en damp.

H226 Ontvlambare vloeistof en damp.

H302 Schadelijk bij inslikken.

H312 Schadelijk bij contact met de huid.

H314 Veroorzaakt ernstige brandwonden en oogletsel.

H315 Veroorzaakt huidirritatie.

H332 Schadelijk bij inademing.

H370 Veroorzaakt schade aan organen.

· Afkortingen en acroniemen:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

(Vervolg op blz. 10)

Veiligheidsinformatieblad
volgens 1907/2006/EG, Artikel 31

datum van de druk: 14.04.2017

Herziening van: 14.04.2017

Handelsnaam: EHRlich'S HEMATOXYLIN

(Vervolg van blz. 9)

*PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Flam. Liq. 2: Ontvlambare vloeistoffen – Categorie 2**Flam. Liq. 3: Ontvlambare vloeistoffen – Categorie 3**Met. Corr.1: Bijtend voor metalen – Categorie 1**Acute Tox. 4: Acute toxiciteit – Categorie 4**Skin Corr. 1A: Huidcorrosie/irritatie – Categorie 1A**Skin Irrit. 2: Huidcorrosie/-irritatie – Categorie 2**Resp. Sens. 1B: Sensibilisatie van de luchtwegen – Categorie 1B**Skin Sens. 1B: Sensibilisatie van de huid – Categorie 1B**Muta. 2: Mutageniteit in geslachtscellen – Categorie 2**STOT SE 1: Specifieke doelorgaantoxiciteit bij eenmalige blootstelling – Categorie 1**STOT SE 2: Specifieke doelorgaantoxiciteit bij eenmalige blootstelling – Categorie 2**Aquatic Acute 1: Gevaar voor het aquatisch milieu - acuut aquatisch gevaar – Categorie 1*

NL

Fiche de données de sécurité

selon 1907/2006/CE, Article 31

Date d'impression : 14.04.2017

Révision: 14.04.2017

RUBRIQUE 1: Identification de la substance/du mélange et de la société/l'entreprise

- **1.1 Identificateur de produit**
- **Nom du produit:** EHRlich'S HEMATOXYLIN
- **Code du produit:** 26040-05, 26753-01, 26040-06
- **1.2 Utilisations identifiées pertinentes de la substance ou du mélange et utilisations déconseillées**
Pas d'autres informations importantes disponibles.
- **Emploi de la substance / de la préparation** Produits chimiques pour laboratoires
- **1.3 Renseignements concernant le fournisseur de la fiche de données de sécurité**
- **Producteur/fournisseur:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- **Service chargé des renseignements:** Product safety department
- **1.4 Numéro d'appel d'urgence:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

RUBRIQUE 2: Identification des dangers

- **2.1 Classification de la substance ou du mélange**
- **Classification selon le règlement (CE) n° 1272/2008**



GHS02 flamme

Flam. Liq. 2 H225 Liquide et vapeurs très inflammables.



GHS08 danger pour la santé

Resp. Sens. 1B H334 Peut provoquer des symptômes allergiques ou d'asthme ou des difficultés respiratoires par inhalation.

Muta. 2 H341 Susceptible d'induire des anomalies génétiques.

STOT SE 2 H371 Risque présumé d'effets graves pour les organes.



GHS05 corrosion

Met. Corr.1 H290 Peut être corrosif pour les métaux.



GHS09 environnement

Aquatic Acute 1 H400 Très toxique pour les organismes aquatiques.



GHS07

Acute Tox. 4 H302 Nocif en cas d'ingestion.

(suite page 2)

Fiche de données de sécurité

selon 1907/2006/CE, Article 31

Date d'impression : 14.04.2017

Révision: 14.04.2017

Nom du produit: EHRlich'S HEMATOXYLIN

(suite de la page 1)

Acute Tox. 4 H332 Nocif par inhalation.
 Skin Irrit. 2 H315 Provoque une irritation cutanée.
 Skin Sens. 1B H317 Peut provoquer une allergie cutanée.

· 2.2 Éléments d'étiquetage

· **Étiquetage selon le règlement (CE) n° 1272/2008** Le produit est classifié et étiqueté selon le règlement CLP.

· Pictogrammes de danger



GHS02 GHS05 GHS07 GHS08 GHS09

· Mention d'avertissement Danger

· **Composants dangereux déterminants pour l'étiquetage:**
méthanol

· Mentions de danger

H225 Liquide et vapeurs très inflammables.
 H290 Peut être corrosif pour les métaux.
 H302+H332 Nocif en cas d'ingestion ou d'inhalation.
 H315 Provoque une irritation cutanée.
 H334 Peut provoquer des symptômes allergiques ou d'asthme ou des difficultés respiratoires par inhalation.
 H317 Peut provoquer une allergie cutanée.
 H341 Susceptible d'induire des anomalies génétiques.
 H371 Risque présumé d'effets graves pour les organes.
 H400 Très toxique pour les organismes aquatiques.

· Conseils de prudence

P210 Tenir à l'écart de la chaleur, des surfaces chaudes, des étincelles, des flammes nues et de toute autre source d'inflammation. Ne pas fumer.
 P241 Utiliser du matériel électrique/de ventilation/d'éclairage antidéflagrant.
 P303+P361+P353 EN CAS DE CONTACT AVEC LA PEAU (ou les cheveux): Enlever immédiatement tous les vêtements contaminés. Rincer la peau à l'eau/Se doucher.
 P321 Traitement spécifique (voir sur cette étiquette).
 P405 Garder sous clef.
 P501 Éliminer le contenu/récipient conformément à la réglementation locale/régionale/nationale/internationale.

· 2.3 Autres dangers

· Résultats des évaluations PBT et vPvB

· **PBT:** Non applicable.
 · **vPvB:** Non applicable.

RUBRIQUE 3: Composition/informations sur les composants

· 3.2 Caractérisation chimique: Mélanges

· **Description:** Mélange des substances mentionnées à la suite avec des additifs non dangereux.

· Composants dangereux:

CAS: 56-81-5	glycerol	25-50%
EINECS: 200-289-5	substance pour laquelle il existe, en vertu des dispositions communautaires, des limites d'exposition sur le lieu de travail	

(suite page 3)

Fiche de données de sécurité

selon 1907/2006/CE, Article 31

Date d'impression : 14.04.2017

Révision: 14.04.2017

Nom du produit: EHRlich'S HEMATOXYLIN

(suite de la page 2)

CAS: 64-17-5 EINECS: 200-578-6	éthanol Flam. Liq. 2, H225	25-50%
CAS: 64-19-7 EINECS: 200-580-7	acide acétique Flam. Liq. 3, H226; Skin Corr. 1A, H314	2,5-10%
CAS: 67-56-1 EINECS: 200-659-6	méthanol Flam. Liq. 2, H225; STOT SE 1, H370; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	≤ 2,5%

· **Indications complémentaires:** Pour le libellé des phrases de risque citées, se référer au chapitre 16.

RUBRIQUE 4: Premiers secours

· **4.1 Description des premiers secours**

· **Remarques générales:**

Les symptômes d'intoxication peuvent apparaître après de nombreuses heures seulement; une surveillance médicale est donc nécessaire au moins 48 heures après un accident.

· **Après inhalation:**

Donner de l'air frais en abondance et consulter un médecin pour plus de sécurité.

En cas d'inconscience, coucher et transporter la personne en position latérale stable.

· **Après contact avec la peau:** Laver immédiatement à l'eau et au savon et bien rincer.

· **Après contact avec les yeux:**

Rincer les yeux, pendant plusieurs minutes, sous l'eau courante en écartant bien les paupières. Si les troubles persistent, consulter un médecin.

· **Après ingestion:** Consulter immédiatement un médecin.

· **4.2 Principaux symptômes et effets, aigus et différés** Pas d'autres informations importantes disponibles.

· **4.3 Indication des éventuels soins médicaux immédiats et traitements particuliers nécessaires**

Pas d'autres informations importantes disponibles.

RUBRIQUE 5: Mesures de lutte contre l'incendie

· **5.1 Moyens d'extinction**

· **Moyens d'extinction:**

CO₂, poudre d'extinction ou eau pulvérisée. Combattre les foyers importants avec de l'eau pulvérisée ou de la mousse résistant à l'alcool.

· **5.2 Dangers particuliers résultant de la substance ou du mélange**

Pas d'autres informations importantes disponibles.

· **5.3 Conseils aux pompiers**

· **Équipement spécial de sécurité:** Porter un appareil de protection respiratoire.

RUBRIQUE 6: Mesures à prendre en cas de dispersion accidentelle

· **6.1 Précautions individuelles, équipement de protection et procédures d'urgence**

Porter un équipement de sécurité. Eloigner les personnes non protégées.

· **6.2 Précautions pour la protection de l'environnement:**

En cas de pénétration dans les eaux ou les égouts, avertir les autorités compétentes.

Diluer avec beaucoup d'eau.

Ne pas rejeter dans les canalisations, dans les eaux de surface et dans les nappes d'eau souterraines.

· **6.3 Méthodes et matériel de confinement et de nettoyage:**

Recueillir les liquides à l'aide d'un produit absorbant (sable, kieselguhr, neutralisant d'acide, liant universel, sciure).

Évacuer les matériaux contaminés en tant que déchets conformément au point 13.

(suite page 4)

Fiche de données de sécurité

selon 1907/2006/CE, Article 31

Date d'impression : 14.04.2017

Révision: 14.04.2017

Nom du produit: EHRlich'S HEMATOXYLIN

(suite de la page 3)

Assurer une aération suffisante.

· **6.4 Référence à d'autres rubriques**

Afin d'obtenir des informations pour une manipulation sûre, consulter le chapitre 7.

Afin d'obtenir des informations sur les équipements de protection personnels, consulter le chapitre 8.

Afin d'obtenir des informations sur l'élimination, consulter le chapitre 13.

RUBRIQUE 7: Manipulation et stockage

· **7.1 Précautions à prendre pour une manipulation sans danger**

Veiller à une bonne ventilation/aspiration du poste de travail.

Eviter la formation d'aérosols.

· **Préventions des incendies et des explosions:**

Tenir à l'abri des sources d'inflammation - ne pas fumer.

Tenir à l'abri de la chaleur.

Prendre des mesures contre les charges électrostatiques.

· **7.2 Conditions d'un stockage sûr, y compris d'éventuelles incompatibilités**

· **Stockage:**

· **Exigences concernant les lieux et conteneurs de stockage:** Stocker dans un endroit frais.

· **Indications concernant le stockage commun:** Pas nécessaire.

· **Autres indications sur les conditions de stockage:**

Tenir les emballages hermétiquement fermés.

Stocker au frais et au sec dans des fûts bien fermés.

Protéger de la forte chaleur et du rayonnement direct du soleil.

· **7.3 Utilisation(s) finale(s) particulière(s)** Pas d'autres informations importantes disponibles.

RUBRIQUE 8: Contrôles de l'exposition/protection individuelle

· **Indications complémentaires pour l'agencement des installations techniques:**

Sans autre indication, voir point 7.

· **8.1 Paramètres de contrôle**

· **Composants présentant des valeurs-seuil à surveiller par poste de travail:**

56-81-5 glycerol

VME Valeur à long terme: 10 mg/m³

64-17-5 éthanol

VME Valeur momentanée: 9500 mg/m³, 5000 ppm

Valeur à long terme: 1900 mg/m³, 1000 ppm

64-19-7 acide acétique

VME Valeur momentanée: 25 mg/m³, 10 ppm

67-56-1 méthanol

VME Valeur momentanée: 1300 mg/m³, 1000 ppm

Valeur à long terme: 260 mg/m³, 200 ppm

risque de pénétration percutanée, (11)

· **Remarques supplémentaires:**

Le présent document s'appuie sur les listes en vigueur au moment de son élaboration.

· **8.2 Contrôles de l'exposition**

· **Equipement de protection individuel:**

· **Mesures générales de protection et d'hygiène:**

Tenir à l'écart des produits alimentaires, des boissons et de la nourriture pour animaux.

(suite page 5)

Fiche de données de sécurité

selon 1907/2006/CE, Article 31

Date d'impression : 14.04.2017

Révision: 14.04.2017

Nom du produit: EHRlich'S HEMATOXYLIN

(suite de la page 4)

Retirer immédiatement les vêtements souillés ou humectés.

Se laver les mains avant les pauses et en fin de travail.

Eviter tout contact avec les yeux et avec la peau.

· **Protection respiratoire:**

En cas d'exposition faible ou de courte durée, utiliser un filtre respiratoire; en cas d'exposition intense ou durable, utiliser un appareil de respiration indépendant de l'air ambiant.

· **Protection des mains:**



Gants de protection

Le matériau des gants doit être imperméable et résistant au produit / à la substance / à la préparation.

À cause du manque de tests, aucune recommandation pour un matériau de gants pour le produit / la préparation / le mélange de produits chimiques ne peut être donnée.

Choix du matériau des gants en fonction des temps de pénétration, du taux de perméabilité et de la dégradation.

· **Matériau des gants**

Le choix de gants appropriés dépend non seulement du matériau, mais aussi d'autres critères de qualité qui peuvent varier d'un fabricant à l'autre. Puisque le produit représente une préparation composée de plusieurs substances, la résistance des matériaux des gants ne peut pas être calculée à l'avance et doit, alors, être contrôlée avant l'utilisation.

· **Temps de pénétration du matériau des gants**

Le temps de pénétration exact est à déterminer par le fabricant des gants de protection et à respecter.

· **Protection des yeux:**



Lunettes de protection hermétiques

RUBRIQUE 9: Propriétés physiques et chimiques

· **9.1 Informations sur les propriétés physiques et chimiques essentielles**

· **Indications générales**

· **Aspect:**

Forme: Solution

Couleur: Brun foncé

· **Odeur:** Genre alcool

· **Seuil olfactif:** Non déterminé.

· **valeur du pH:** Non déterminé.

· **Changement d'état**

Point de fusion/point de congélation: Non déterminé.

Point initial d'ébullition et intervalle d'ébullition: 78 °C

· **Point d'éclair** 17 °C

· **Inflammabilité (solide, gaz):** Non applicable.

· **Température d'inflammation:** 400 °C

· **Température de décomposition:** Non déterminé.

· **Température d'auto-inflammabilité:** Le produit ne s'enflamme pas spontanément.

(suite page 6)

Fiche de données de sécurité

selon 1907/2006/CE, Article 31

Date d'impression : 14.04.2017

Révision: 14.04.2017

Nom du produit: EHRlich'S HEMATOXYLIN

(suite de la page 5)

· Propriétés explosives:	<i>Le produit n'est pas explosif; toutefois, des mélanges explosifs vapeur-air peuvent se former.</i>
· Limites d'explosion: Inférieure: Supérieure:	<i>0,9 Vol % 15,0 Vol %</i>
· Pression de vapeur à 20 °C:	<i>59 hPa</i>
· Densité: · Densité relative · Densité de vapeur: · Taux d'évaporation:	<i>Non déterminée. Non déterminé. Non déterminé. Non déterminé.</i>
· Solubilité dans/miscibilité avec l'eau:	<i>Entièrement miscible</i>
· Coefficient de partage: n-octanol/eau:	<i>Non déterminé.</i>
· Viscosité: Dynamique: Cinématique:	<i>Non déterminé. Non déterminé.</i>
· Teneur en solvants: Solvants organiques: VOC (CE) · 9.2 Autres informations	<i>66,0 % 33,80 % Pas d'autres informations importantes disponibles.</i>

RUBRIQUE 10: Stabilité et réactivité

- **10.1 Réactivité** *Pas d'autres informations importantes disponibles.*
- **10.2 Stabilité chimique**
- **Décomposition thermique/conditions à éviter:** *Pas de décomposition en cas d'usage conforme.*
- **10.3 Possibilité de réactions dangereuses** *Aucune réaction dangereuse connue.*
- **10.4 Conditions à éviter** *Pas d'autres informations importantes disponibles.*
- **10.5 Matières incompatibles:** *Pas d'autres informations importantes disponibles.*
- **10.6 Produits de décomposition dangereux:** *Pas de produits de décomposition dangereux connus*

RUBRIQUE 11: Informations toxicologiques

- **11.1 Informations sur les effets toxicologiques**
- **Toxicité aiguë**
Nocif en cas d'ingestion ou d'inhalation.

· **Valeurs LD/LC50 déterminantes pour la classification:**

67-56-1 méthanol

Oral	LD50	5628 mg/kg (rat)
Dermique	LD50	15800 mg/kg (lapin)

- **Effet primaire d'irritation:**
- **Corrosion cutanée/irritation cutanée**
Provoque une irritation cutanée.
- **Lésions oculaires graves/irritation oculaire**
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.

(suite page 7)

Fiche de données de sécurité

selon 1907/2006/CE, Article 31

Date d'impression : 14.04.2017

Révision: 14.04.2017

Nom du produit: EHRlich'S HEMATOXYLIN

(suite de la page 6)

- **Sensibilisation respiratoire ou cutanée**
Peut provoquer des symptômes allergiques ou d'asthme ou des difficultés respiratoires par inhalation.
Peut provoquer une allergie cutanée.
- **Effets CMR (cancérogène, mutagène et toxique pour la reproduction)**
- **Mutagenicité sur les cellules germinales**
Susceptible d'induire des anomalies génétiques.
- **Cancérogénicité** Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Toxicité pour la reproduction**
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Toxicité spécifique pour certains organes cibles - exposition unique**
Risque présumé d'effets graves pour les organes.
- **Toxicité spécifique pour certains organes cibles - exposition répétée**
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Danger par aspiration** Compte tenu des données disponibles, les critères de classification ne sont pas remplis.

RUBRIQUE 12: Informations écologiques

- **12.1 Toxicité**
- **Toxicité aquatique:** Pas d'autres informations importantes disponibles.
- **12.2 Persistance et dégradabilité** Pas d'autres informations importantes disponibles.
- **12.3 Potentiel de bioaccumulation** Pas d'autres informations importantes disponibles.
- **12.4 Mobilité dans le sol** Pas d'autres informations importantes disponibles.
- **Effets écotoxiques:**
- **Remarque:** Très toxique chez les poissons.
- **Autres indications écologiques:**
- **Indications générales:**
Catégorie de pollution des eaux 1 (D) (Classification propre): peu polluant
Ne pas laisser le produit, non dilué ou en grande quantité, pénétrer la nappe phréatique, les eaux ou les canalisations.
Dans les eaux, également toxique pour les poissons et le plancton.
Très toxique pour organismes aquatiques.
- **12.5 Résultats des évaluations PBT et VPVB**
- **PBT:** Non applicable.
- **vPvB:** Non applicable.
- **12.6 Autres effets néfastes** Pas d'autres informations importantes disponibles.

RUBRIQUE 13: Considérations relatives à l'élimination

- **13.1 Méthodes de traitement des déchets**
- **Recommandation:** Ne doit pas être évacué avec les ordures ménagères. Ne pas laisser pénétrer dans les égouts.
- **Emballages non nettoyés:**
- **Recommandation:** Evacuation conformément aux prescriptions légales.
- **Produit de nettoyage recommandé:** Eau, éventuellement avec des produits de nettoyage

RUBRIQUE 14: Informations relatives au transport

- **14.1 Numéro ONU**
- **ADR, IMDG, IATA** UN1987

(suite page 8)

Fiche de données de sécurité

selon 1907/2006/CE, Article 31

Date d'impression : 14.04.2017

Révision: 14.04.2017

Nom du produit: **EHRlich'S HEMATOXYLIN**

(suite de la page 7)

· **14.2 Désignation officielle de transport de l'ONU**

· **ADR**

1987 ALCOOLS, N.S.A. (ÉTHANOL (ALCOOL ÉTHYLIQUE), MÉTHANOL), DANGEREUX POUR L'ENVIRONNEMENT

· **IMDG**

ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL)

· **IATA**

ALCOHOLS, N.O.S. (ETHANOL, METHANOL)

· **14.3 Classe(s) de danger pour le transport**

· **ADR**· **Classe**

3 Liquides inflammables.

· **Étiquette**

3

· **IMDG, IATA**· **Class**

3 Liquides inflammables.

· **Label**

3

· **14.4 Groupe d'emballage**

· **ADR, IMDG, IATA**

II

· **14.5 Dangers pour l'environnement:**

· **Marquage spécial (ADR):**

Signe conventionnel (poisson et arbre)

· **14.6 Précautions particulières à prendre par l'utilisateur**

· **Indice Kemler:**

Attention: Liquides inflammables.

· **No EMS:**

33

· **Stowage Category**

F-E,S-D

B

· **14.7 Transport en vrac conformément à l'annexe II de la convention Marpol et au recueil IBC**

Non applicable.

· **Indications complémentaires de transport:**

· **ADR**· **Quantités limitées (LQ)**

1L

· **Quantités exceptées (EQ)**

Code: E2

Quantité maximale nette par emballage intérieur: 30 ml

Quantité maximale nette par emballage extérieur: 500

ml

· **Catégorie de transport**

2

· **Code de restriction en tunnels**

D/E

· **IMDG**· **Limited quantities (LQ)**

1L

(suite page 9)

Fiche de données de sécurité

selon 1907/2006/CE, Article 31

Date d'impression : 14.04.2017

Révision: 14.04.2017

Nom du produit: EHRlich'S HEMATOXYLIN

(suite de la page 8)

· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· "Règlement type" de l'ONU:	UN 1987 ALCOOLS, N.S.A. (ÉTHANOL (ALCOOL ÉTHYLIQUE), MÉTHANOL), 3, II, DANGEREUX POUR L'ENVIRONNEMENT

RUBRIQUE 15: Informations relatives à la réglementation

- **15.1 Réglementations/législation particulières à la substance ou au mélange en matière de sécurité, de santé et d'environnement**
- Directive 2012/18/UE
- Substances dangereuses désignées - ANNEXE I méthanol
- Catégorie SEVESO
 - E1 Danger pour l'environnement aquatique
 - P5c LIQUIDES INFLAMMABLES
- Quantité seuil (tonnes) pour l'application des exigences relatives au seuil bas 100 t
- Quantité seuil (tonnes) pour l'application des exigences relatives au seuil haut 200 t
- RÈGLEMENT (CE) N° 1907/2006 ANNEXE XVII Conditions de limitation: 3
- 15.2 Évaluation de la sécurité chimique: Une évaluation de la sécurité chimique n'a pas été réalisée.

RUBRIQUE 16: Autres informations

Ces indications sont fondées sur l'état actuel de nos connaissances, mais ne constituent pas une garantie quant aux propriétés du produit et ne donnent pas lieu à un rapport juridique contractuel.

- **Phrases importantes**
 - H225 Liquide et vapeurs très inflammables.
 - H226 Liquide et vapeurs inflammables.
 - H302 Nocif en cas d'ingestion.
 - H312 Nocif par contact cutané.
 - H314 Provoque des brûlures de la peau et des lésions oculaires graves.
 - H315 Provoque une irritation cutanée.
 - H332 Nocif par inhalation.
 - H370 Risque avéré d'effets graves pour les organes.
- **Acronymes et abréviations:**
 - ADR: Accord européen sur le transport des marchandises dangereuses par Route
 - IMDG: International Maritime Code for Dangerous Goods
 - IATA: International Air Transport Association
 - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 - EINECS: European Inventory of Existing Commercial Chemical Substances
 - ELINCS: European List of Notified Chemical Substances
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - VOC: Volatile Organic Compounds (USA, EU)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
 - PBT: Persistent, Bioaccumulative and Toxic
 - vPvB: very Persistent and very Bioaccumulative
 - Flam. Liq. 2: Liquides inflammables – Catégorie 2
 - Flam. Liq. 3: Liquides inflammables – Catégorie 3
 - Met. Corr. 1: Substances ou mélanges corrosifs pour les métaux – Catégorie 1
 - Acute Tox. 4: Toxicité aiguë – Catégorie 4
 - Skin Corr. 1A: Corrosion cutanée/irritation cutanée – Catégorie 1A
 - Skin Irrit. 2: Corrosion cutanée/irritation cutanée – Catégorie 2
 - Resp. Sens. 1B: Sensibilisation respiratoire – Catégorie 1B

(suite page 10)

Fiche de données de sécurité
selon 1907/2006/CE, Article 31

Date d'impression : 14.04.2017

Révision: 14.04.2017

Nom du produit: EHRlich'S HEMATOXYLIN

(suite de la page 9)

*Skin Sens. 1B: Sensibilisation cutanée – Catégorie 1B**Muta. 2: Mutagénicité sur les cellules germinales – Catégorie 2**STOT SE 1: Toxicité spécifique pour certains organes cibles (exposition unique) – Catégorie 1**STOT SE 2: Toxicité spécifique pour certains organes cibles (exposition unique) – Catégorie 2**Aquatic Acute 1: Dangers pour le milieu aquatique- toxicité aiguë pour le milieu aquatique – Catégorie 1*

FR

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

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ABSCHNITT 1: Bezeichnung des Stoffs beziehungsweise des Gemischs und des Unternehmens

- **1.1 Produktidentifikator**
- **Handelsname:** EHRlich'S HEMATOXYLIN
- **Artikelnummer:** 26040-05, 26753-01, 26040-06
- **1.2 Relevante identifizierte Verwendungen des Stoffs oder Gemischs und Verwendungen, von denen abgeraten wird**
Keine weiteren relevanten Informationen verfügbar.
- **Verwendung des Stoffes / des Gemisches** Laborchemikalien
- **1.3 Einzelheiten zum Lieferanten, der das Sicherheitsdatenblatt bereitstellt**
- **Hersteller/Lieferant:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com

Science Services GmbH
Unterhachinger Str. 75
81737 München Germany
Tel: +49(0)89 18 93 668-0
safety@scienceservices.de

24h Giftnotruf Munchen: +49 (0)89 19240
Toxikologische Abteilung der II. Medizinischen Klinik
rechts der Isar, Munchen. - www.toxinfo.org
- **Auskunftgebender Bereich:** Product safety department
- **1.4 Notrufnummer:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

ABSCHNITT 2: Mögliche Gefahren

- **2.1 Einstufung des Stoffs oder Gemischs**
- **Einstufung gemäß Verordnung (EG) Nr. 1272/2008**



GHS02 Flamme

Flam. Liq. 2 H225 Flüssigkeit und Dampf leicht entzündbar.



GHS08 Gesundheitsgefahr

Resp. Sens. 1B H334 Kann bei Einatmen Allergie, asthmaartige Symptome oder Atembeschwerden verursachen.

Muta. 2 H341 Kann vermutlich genetische Defekte verursachen.

STOT SE 2 H371 Kann die Organe schädigen.



GHS05 Ätzwirkung

Met. Corr.1 H290 Kann gegenüber Metallen korrosiv sein.

(Fortsetzung auf Seite 2)

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

Druckdatum: 14.04.2017

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Handelsname: EHRlich'S HEMATOXYLIN

(Fortsetzung von Seite 1)



GHS09 Umwelt

Aquatic Acute 1 H400 Sehr giftig für Wasserorganismen.



GHS07

Acute Tox. 4 H302 Gesundheitsschädlich bei Verschlucken.

Acute Tox. 4 H332 Gesundheitsschädlich bei Einatmen.

Skin Irrit. 2 H315 Verursacht Hautreizungen.

Skin Sens. 1B H317 Kann allergische Hautreaktionen verursachen.

· 2.2 Kennzeichnungselemente

· Kennzeichnung gemäß Verordnung (EG) Nr. 1272/2008

Das Produkt ist gemäß CLP-Verordnung eingestuft und gekennzeichnet.

· Gefahrenpiktogramme



GHS02



GHS05



GHS07



GHS08



GHS09

· Signalwort Gefahr

· Gefahrbestimmende Komponenten zur Etikettierung:

Methanol

· Gefahrenhinweise

H225 Flüssigkeit und Dampf leicht entzündbar.

H290 Kann gegenüber Metallen korrosiv sein.

H302+H332 Gesundheitsschädlich bei Verschlucken oder Einatmen.

H315 Verursacht Hautreizungen.

H334 Kann bei Einatmen Allergie, asthmaartige Symptome oder Atembeschwerden verursachen.

H317 Kann allergische Hautreaktionen verursachen.

H341 Kann vermutlich genetische Defekte verursachen.

H371 Kann die Organe schädigen.

H400 Sehr giftig für Wasserorganismen.

· Sicherheitshinweise

P210 Von Hitze, heißen Oberflächen, Funken, offenen Flammen und anderen Zündquellen fernhalten. Nicht rauchen.

P241 Explosionsgeschützte elektrische Geräte/Lüftungsanlagen/Beleuchtungsanlagen verwenden.

P303+P361+P353 BEI BERÜHRUNG MIT DER HAUT (oder dem Haar): Alle kontaminierten Kleidungsstücke sofort ausziehen. Haut mit Wasser abwaschen/duschen.

P321 Besondere Behandlung (siehe auf diesem Kennzeichnungsetikett).

P405 Unter Verschluss aufbewahren.

P501 Entsorgung des Inhalts / des Behälters gemäß den örtlichen / regionalen / nationalen / internationalen Vorschriften.

· 2.3 Sonstige Gefahren

· Ergebnisse der PBT- und vPvB-Beurteilung

· **PBT:** Nicht anwendbar.

· **vPvB:** Nicht anwendbar.

DE

(Fortsetzung auf Seite 3)

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

Druckdatum: 14.04.2017

überarbeitet am: 14.04.2017

Handelsname: EHRlich'S HEMATOXYLIN

(Fortsetzung von Seite 2)

ABSCHNITT 3: Zusammensetzung/Angaben zu Bestandteilen

- **3.2 Chemische Charakterisierung: Gemische**
- **Beschreibung:** Gemisch aus nachfolgend angeführten Stoffen mit ungefährlichen Beimengungen.

- **Gefährliche Inhaltsstoffe:**

CAS: 56-81-5 EINECS: 200-289-5	Glycerin Stoff, für den ein gemeinschaftlicher Grenzwert für die Exposition am Arbeitsplatz gilt	25-50%
CAS: 64-17-5 EINECS: 200-578-6	Ethanol ⚠ Flam. Liq. 2, H225	25-50%
CAS: 64-19-7 EINECS: 200-580-7	Essigsäure ⚠ Flam. Liq. 3, H226; ⚠ Skin Corr. 1A, H314	2,5-10%
CAS: 67-56-1 EINECS: 200-659-6	Methanol ⚠ Flam. Liq. 2, H225; ⚠ STOT SE 1, H370; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	≤ 2,5%

- **Zusätzliche Hinweise:** Der Wortlaut der angeführten Gefahrenhinweise ist dem Abschnitt 16 zu entnehmen.

ABSCHNITT 4: Erste-Hilfe-Maßnahmen

- **4.1 Beschreibung der Erste-Hilfe-Maßnahmen**
- **Allgemeine Hinweise:**
Vergiftungssymptome können erst nach vielen Stunden auftreten, deshalb ärztliche Überwachung mindestens 48 Stunden nach einem Unfall.
- **Nach Einatmen:**
Reichlich Frischluftzufuhr und sicherheitshalber Arzt aufsuchen.
Bei Bewußtlosigkeit Lagerung und Transport in stabiler Seitenlage.
- **Nach Hautkontakt:** Sofort mit Wasser und Seife abwaschen und gut nachspülen.
- **Nach Augenkontakt:**
Augen mehrere Minuten bei geöffnetem Lidspalt unter fließendem Wasser spülen. Bei anhaltenden Beschwerden Arzt konsultieren.
- **Nach Verschlucken:** Sofort Arzt aufsuchen.
- **4.2 Wichtigste akute und verzögert auftretende Symptome und Wirkungen**
Keine weiteren relevanten Informationen verfügbar.
- **4.3 Hinweise auf ärztliche Soforthilfe oder Spezialbehandlung**
Keine weiteren relevanten Informationen verfügbar.

ABSCHNITT 5: Maßnahmen zur Brandbekämpfung

- **5.1 Löschmittel**
- **Geeignete Löschmittel:**
CO₂, Löschpulver oder Wassersprühstrahl. Größeren Brand mit Wassersprühstrahl oder alkoholbeständigem Schaum bekämpfen.
- **5.2 Besondere vom Stoff oder Gemisch ausgehende Gefahren**
Keine weiteren relevanten Informationen verfügbar.
- **5.3 Hinweise für die Brandbekämpfung**
- **Besondere Schutzausrüstung:** Atemschutzgerät anlegen.

DE

(Fortsetzung auf Seite 4)

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

Druckdatum: 14.04.2017

überarbeitet am: 14.04.2017

Handelsname: EHRlich'S HEMATOXYLIN

(Fortsetzung von Seite 3)

ABSCHNITT 6: Maßnahmen bei unbeabsichtigter Freisetzung

- **6.1 Personenbezogene Vorsichtsmaßnahmen, Schutzausrüstungen und in Notfällen anzuwendende Verfahren**
Schutzausrüstung tragen. Ungeschützte Personen fernhalten.
- **6.2 Umweltschutzmaßnahmen:**
Bei Eindringen in Gewässer oder Kanalisation zuständige Behörden benachrichtigen.
Mit viel Wasser verdünnen.
Nicht in die Kanalisation/Oberflächenwasser/Grundwasser gelangen lassen.
- **6.3 Methoden und Material für Rückhaltung und Reinigung:**
Mit flüssigkeitsbindendem Material (Sand, Kieselgur, Säurebinder, Universalbinder, Sägemehl) aufnehmen.
Kontaminiertes Material als Abfall nach Abschnitt 13 entsorgen.
Für ausreichende Lüftung sorgen.
- **6.4 Verweis auf andere Abschnitte**
Informationen zur sicheren Handhabung siehe Abschnitt 7.
Informationen zur persönlichen Schutzausrüstung siehe Abschnitt 8.
Informationen zur Entsorgung siehe Abschnitt 13.

ABSCHNITT 7: Handhabung und Lagerung

- **7.1 Schutzmaßnahmen zur sicheren Handhabung**
Für gute Belüftung/Absaugung am Arbeitsplatz sorgen.
Aerosolbildung vermeiden.
- **Hinweise zum Brand- und Explosionsschutz:**
Zündquellen fernhalten - nicht rauchen.
Vor Hitze schützen.
Maßnahmen gegen elektrostatische Aufladung treffen.
- **7.2 Bedingungen zur sicheren Lagerung unter Berücksichtigung von Unverträglichkeiten**
- **Lagerung:**
- **Anforderung an Lagerräume und Behälter:** An einem kühlen Ort lagern.
- **Zusammenlagerungshinweise:** Nicht erforderlich.
- **Weitere Angaben zu den Lagerbedingungen:**
Behälter dicht geschlossen halten.
In gut verschlossenen Gebinden kühl und trocken lagern.
Vor Hitze und direkter Sonnenbestrahlung schützen.
- **Lagerklasse:**
- **Klassifizierung nach Betriebssicherheitsverordnung (BetrSichV):**
Auf Metalle korrosiv wirkende Stoffe oder Gemische
- **7.3 Spezifische Endanwendungen** Keine weiteren relevanten Informationen verfügbar.

ABSCHNITT 8: Begrenzung und Überwachung der Exposition/Persönliche Schutzausrüstungen

- **Zusätzliche Hinweise zur Gestaltung technischer Anlagen:** Keine weiteren Angaben, siehe Abschnitt 7.
- **8.1 Zu überwachende Parameter**

· **Bestandteile mit arbeitsplatzbezogenen, zu überwachenden Grenzwerten:**

56-81-5 Glycerin

AGW	Langzeitwert: 200 E mg/m ³ 2 (I);DFG, Y
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(Fortsetzung auf Seite 5)

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

Druckdatum: 14.04.2017

überarbeitet am: 14.04.2017

Handelsname: EHRlich'S HEMATOXYLIN

(Fortsetzung von Seite 4)

64-17-5 Ethanol
 AGW Langzeitwert: 960 mg/m³, 500 ml/m³
 2(I);DFG, Y
64-19-7 Essigsäure
 AGW Langzeitwert: 25 mg/m³, 10 ml/m³
 2(I);DFG, EU, Y
67-56-1 Methanol
 AGW Langzeitwert: 270 mg/m³, 200 ml/m³
 4(II);DFG, EU, H, Y

· Bestandteile mit biologischen Grenzwerten:
67-56-1 Methanol
 BGW 30 mg/l
 Untersuchungsmaterial: Urin
 Probenahmezeitpunkt: bei Langzeitexposition: Nach mehreren vorangegangenen Schichten,
 Expositionsende bzw. Schichtende
 Parameter: Methanol

 · **Zusätzliche Hinweise:** Als Grundlage dienen die bei der Erstellung gültigen Listen.

 · **8.2 Begrenzung und Überwachung der Exposition**

 · **Persönliche Schutzausrüstung:**

 · **Allgemeine Schutz- und Hygienemaßnahmen:**

Von Nahrungsmitteln, Getränken und Futtermitteln fernhalten.

Beschmutzte, getränkte Kleidung sofort ausziehen.

Vor den Pausen und bei Arbeitsende Hände waschen.

Berührung mit den Augen und der Haut vermeiden.

 · **Atemschutz:**

Bei kurzzeitiger oder geringer Belastung Atemfiltergerät; bei intensiver bzw. längerer Exposition unluftunabhängiges Atemschutzgerät verwenden.

 · **Handschutz:**


Schutzhandschuhe

Das Handschuhmaterial muss undurchlässig und beständig gegen das Produkt / den Stoff / die Zubereitung sein. Aufgrund fehlender Tests kann keine Empfehlung zum Handschuhmaterial für das Produkt / die Zubereitung / das Chemikaliengemisch abgegeben werden.

Auswahl des Handschuhmaterials unter Beachtung der Durchbruchzeiten, Permeationsraten und der Degradation.

 · **Handschuhmaterial**

Die Auswahl eines geeigneten Handschuhs ist nicht nur vom Material, sondern auch von weiteren Qualitätsmerkmalen abhängig und von Hersteller zu Hersteller unterschiedlich. Da das Produkt eine Zubereitung aus mehreren Stoffen darstellt, ist die Beständigkeit von Handschuhmaterialien nicht vorausberechenbar und muß deshalb vor dem Einsatz überprüft werden.

 · **Durchdringungszeit des Handschuhmaterials**

Die genaue Durchbruchzeit ist beim Schutzhandschuhhersteller zu erfahren und einzuhalten.

(Fortsetzung auf Seite 6)

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

Druckdatum: 14.04.2017

überarbeitet am: 14.04.2017

Handelsname: EHRlich'S HEMATOXYLIN

(Fortsetzung von Seite 5)

· Augenschutz:



Dichtschließende Schutzbrille

ABSCHNITT 9: Physikalische und chemische Eigenschaften

· 9.1 Angaben zu den grundlegenden physikalischen und chemischen Eigenschaften

· Allgemeine Angaben

· Aussehen:

· Form:	Lösung
· Farbe:	Dunkelbraun
· Geruch:	Alkoholartig
· Geruchsschwelle:	Nicht bestimmt.

· pH-Wert: Nicht bestimmt.

· Zustandsänderung

· Schmelzpunkt/Gefrierpunkt:	Nicht bestimmt.
· Siedebeginn und Siedebereich:	78 °C

· Flammpunkt: 17 °C

· Entzündbarkeit (fest, gasförmig): Nicht anwendbar.

· Zündtemperatur: 400 °C

· Zersetzungstemperatur: Nicht bestimmt.

· Selbstentzündungstemperatur: Das Produkt ist nicht selbstentzündlich.

· Explosive Eigenschaften: Das Produkt ist nicht explosionsgefährlich, jedoch ist die Bildung explosionsgefährlicher Dampf-/Luftgemische möglich.

· Explosionsgrenzen:

· Untere:	0,9 Vol %
· Obere:	15,0 Vol %

· Dampfdruck bei 20 °C: 59 hPa

· Dichte: Nicht bestimmt.

· Relative Dichte: Nicht bestimmt.

· Dampfichte: Nicht bestimmt.

· Verdampfungsgeschwindigkeit: Nicht bestimmt.

· Löslichkeit in / Mischbarkeit mit

Wasser: Vollständig mischbar.

· Verteilungskoeffizient: n-Octanol/Wasser: Nicht bestimmt.

· Viskosität:

· Dynamisch:	Nicht bestimmt.
· Kinematisch:	Nicht bestimmt.

· Lösemittelgehalt:

· Organische Lösemittel:	66,0 %
· VOC (EU)	33,80 %

(Fortsetzung auf Seite 7)

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

Druckdatum: 14.04.2017

überarbeitet am: 14.04.2017

Handelsname: EHRlich'S HEMATOXYLIN

(Fortsetzung von Seite 6)

· 9.2 Sonstige Angaben

Keine weiteren relevanten Informationen verfügbar.

ABSCHNITT 10: Stabilität und Reaktivität

- **10.1 Reaktivität** Keine weiteren relevanten Informationen verfügbar.
- **10.2 Chemische Stabilität**
- **Thermische Zersetzung / zu vermeidende Bedingungen:**
Keine Zersetzung bei bestimmungsgemäßer Verwendung.
- **10.3 Möglichkeit gefährlicher Reaktionen** Keine gefährlichen Reaktionen bekannt.
- **10.4 Zu vermeidende Bedingungen** Keine weiteren relevanten Informationen verfügbar.
- **10.5 Unverträgliche Materialien:** Keine weiteren relevanten Informationen verfügbar.
- **10.6 Gefährliche Zersetzungsprodukte:** Keine gefährlichen Zersetzungsprodukte bekannt.

ABSCHNITT 11: Toxikologische Angaben

- **11.1 Angaben zu toxikologischen Wirkungen**
 - **Akute Toxizität**
Gesundheitsschädlich bei Verschlucken oder Einatmen.
- | | | |
|--|------|----------------------|
| · Einstufungsrelevante LD/LC50-Werte: | | |
| 67-56-1 Methanol | | |
| Oral | LD50 | 5628 mg/kg (rat) |
| Dermal | LD50 | 15800 mg/kg (rabbit) |
- **Primäre Reizwirkung:**
 - **Ätz-/Reizwirkung auf die Haut**
Verursacht Hautreizungen.
 - **Schwere Augenschädigung/-reizung** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
 - **Sensibilisierung der Atemwege/Haut**
Kann bei Einatmen Allergie, asthmaartige Symptome oder Atembeschwerden verursachen.
Kann allergische Hautreaktionen verursachen.
 - **CMR-Wirkungen (krebserzeugende, erbgutverändernde und fortpflanzungsgefährdende Wirkung)**
 - **Keimzell-Mutagenität**
Kann vermutlich genetische Defekte verursachen.
 - **Karzinogenität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
 - **Reproduktionstoxizität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
 - **Spezifische Zielorgan-Toxizität bei einmaliger Exposition**
Kann die Organe schädigen.
 - **Spezifische Zielorgan-Toxizität bei wiederholter Exposition**
Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
 - **Aspirationsgefahr** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

ABSCHNITT 12: Umweltbezogene Angaben

- **12.1 Toxizität**
- **Aquatische Toxizität:** Keine weiteren relevanten Informationen verfügbar.
- **12.2 Persistenz und Abbaubarkeit** Keine weiteren relevanten Informationen verfügbar.
- **12.3 Bioakkumulationspotenzial** Keine weiteren relevanten Informationen verfügbar.
- **12.4 Mobilität im Boden** Keine weiteren relevanten Informationen verfügbar.
- **Ökotoxische Wirkungen:**
- **Bemerkung:** Sehr giftig für Fische.

(Fortsetzung auf Seite 8)

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

Druckdatum: 14.04.2017

überarbeitet am: 14.04.2017

Handelsname: EHRlich'S HEMATOXYLIN

(Fortsetzung von Seite 7)

- **Weitere ökologische Hinweise:**
- **Allgemeine Hinweise:**
*Wassergefährdungsklasse 1 (Selbsteinstufung): schwach wassergefährdend
 Nicht unverdünnt bzw. in größeren Mengen in das Grundwasser, in Gewässer oder in die Kanalisation gelangen lassen.
 In Gewässern auch giftig für Fische und Plankton.
 sehr giftig für Wasserorganismen*
- **12.5 Ergebnisse der PBT- und vPvB-Beurteilung**
- **PBT:** Nicht anwendbar.
- **vPvB:** Nicht anwendbar.
- **12.6 Andere schädliche Wirkungen** Keine weiteren relevanten Informationen verfügbar.

ABSCHNITT 13: Hinweise zur Entsorgung

- **13.1 Verfahren der Abfallbehandlung**
- **Empfehlung:** Darf nicht zusammen mit Hausmüll entsorgt werden. Nicht in die Kanalisation gelangen lassen.
- **Ungereinigte Verpackungen:**
- **Empfehlung:** Entsorgung gemäß den behördlichen Vorschriften.
- **Empfohlenes Reinigungsmittel:** Wasser, gegebenenfalls mit Zusatz von Reinigungsmitteln.

ABSCHNITT 14: Angaben zum Transport

- | | |
|--|---|
| <ul style="list-style-type: none"> · 14.1 UN-Nummer · ADR, IMDG, IATA | <p style="text-align: right;">UN1987</p> |
| <ul style="list-style-type: none"> · 14.2 Ordnungsgemäße UN-Versandbezeichnung · ADR · IMDG · IATA | <p style="text-align: right;">1987 ALKOHOLE, N.A.G. (ETHANOL (ETHYLALKOHOL), METHANOL), UMWELTGEFÄHRDEND
 ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL)
 ALCOHOLS, N.O.S. (ETHANOL, METHANOL)</p> |
| <ul style="list-style-type: none"> · 14.3 Transportgefahrenklassen · ADR | <div style="display: flex; align-items: center; gap: 10px;">   </div> <p style="text-align: right;">3 Entzündbare flüssige Stoffe
3</p> |
| <ul style="list-style-type: none"> · Klasse · Gefahrzettel | <p style="text-align: right;">3 Entzündbare flüssige Stoffe
3</p> |
| <ul style="list-style-type: none"> · IMDG, IATA | <div style="display: flex; align-items: center; gap: 10px;">  </div> <p style="text-align: right;">3 Entzündbare flüssige Stoffe
3</p> |
| <ul style="list-style-type: none"> · Class · Label | <p style="text-align: right;">3 Entzündbare flüssige Stoffe
3</p> |
| <ul style="list-style-type: none"> · 14.4 Verpackungsgruppe · ADR, IMDG, IATA | <p style="text-align: right;">II</p> |

(Fortsetzung auf Seite 9)

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

Druckdatum: 14.04.2017

überarbeitet am: 14.04.2017

Handelsname: EHRlich'S HEMATOXYLIN

(Fortsetzung von Seite 8)

· 14.5 Umweltgefahren:	
· Besondere Kennzeichnung (ADR):	Symbol (Fisch und Baum)
· 14.6 Besondere Vorsichtsmaßnahmen für den Verwender	Achtung: Entzündbare flüssige Stoffe
· Kemler-Zahl:	33
· EMS-Nummer:	F-E,S-D
· Stowage Category	B
· 14.7 Massengutbeförderung gemäß Anhang II des MARPOL-Übereinkommens und gemäß IBC-Code	Nicht anwendbar.
· Transport/weitere Angaben:	
· ADR	
· Begrenzte Menge (LQ)	1L
· Freigestellte Mengen (EQ)	Code: E2 Höchste Nettomenge je Innenverpackung: 30 ml Höchste Nettomenge je Außenverpackung: 500 ml
· Beförderungskategorie	2
· Tunnelbeschränkungscode	D/E
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1987 ALKOHOLE, N.A.G. (ETHANOL (ETHYLALKOHOL), METHANOL), 3, II, UMWELTGEFÄHRDEND

ABSCHNITT 15: Rechtsvorschriften

- **15.1 Vorschriften zu Sicherheit, Gesundheits- und Umweltschutz/spezifische Rechtsvorschriften für den Stoff oder das Gemisch**
- Richtlinie 2012/18/EU
- Namentlich aufgeführte gefährliche Stoffe - ANHANG I Methanol
- **Seveso-Kategorie**
E1 Gewässergefährdend
P5c ENTZÜNDBARE FLÜSSIGKEITEN
- **Mengenschwelle (in Tonnen) für die Anwendung in Betrieben der unteren Klasse 100 t**
- **Mengenschwelle (in Tonnen) für die Anwendung in Betrieben der oberen Klasse 200 t**
- **VERORDNUNG (EG) Nr. 1907/2006 ANHANG XVII Beschränkungsbedingungen: 3**

· **Nationale Vorschriften:**· **Technische Anleitung Luft:**

Klasse	Anteil in %
I	1,5
II	3,2
NK	61,3

· **Wassergefährdungsklasse: WGK 1 (Selbsteinstufung): schwach wassergefährdend.**

(Fortsetzung auf Seite 10)

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

Druckdatum: 14.04.2017

überarbeitet am: 14.04.2017

Handelsname: EHRlich'S HEMATOXYLIN

(Fortsetzung von Seite 9)

· **15.2 Stoffsicherheitsbeurteilung:** Eine Stoffsicherheitsbeurteilung wurde nicht durchgeführt.

ABSCHNITT 16: Sonstige Angaben

Die Angaben stützen sich auf den heutigen Stand unserer Kenntnisse, sie stellen jedoch keine Zusicherung von Produkteigenschaften dar und begründen kein vertragliches Rechtsverhältnis.

· **Relevante Sätze**

H225 Flüssigkeit und Dampf leicht entzündbar.

H226 Flüssigkeit und Dampf entzündbar.

H302 Gesundheitsschädlich bei Verschlucken.

H312 Gesundheitsschädlich bei Hautkontakt.

H314 Verursacht schwere Verätzungen der Haut und schwere Augenschäden.

H315 Verursacht Hautreizungen.

H332 Gesundheitsschädlich bei Einatmen.

H370 Schädigt die Organe.

· **Abkürzungen und Akronyme:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Entzündbare Flüssigkeiten – Kategorie 2

Flam. Liq. 3: Entzündbare Flüssigkeiten – Kategorie 3

Met. Corr.1: Korrosiv gegenüber Metallen – Kategorie 1

Acute Tox. 4: Akute Toxizität – Kategorie 4

Skin Corr. 1A: Hautreizende/-ätzende Wirkung – Kategorie 1A

Skin Irrit. 2: Hautreizende/-ätzende Wirkung – Kategorie 2

Resp. Sens. 1B: Sensibilisierung der Atemwege – Kategorie 1B

Skin Sens. 1B: Sensibilisierung der Haut – Kategorie 1B

Muta. 2: Keimzellmutagenität – Kategorie 2

STOT SE 1: Spezifische Zielorgan-Toxizität (einmalige Exposition) – Kategorie 1

STOT SE 2: Spezifische Zielorgan-Toxizität (einmalige Exposition) – Kategorie 2

Aquatic Acute 1: Gewässergefährdend - akut gewässergefährdend – Kategorie 1

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 14.04.2017

Revisione: 14.04.2017

SEZIONE 1: Identificazione della sostanza o della miscela e della società/impresa

- **1.1 Identificatore del prodotto**
- **Denominazione commerciale:** EHRlich'S HEMATOXYLIN
- **Articolo numero:** 26040-05, 26753-01, 26040-06
- **1.2 Usi identificati pertinenti della sostanza o della miscela e usi sconsigliati**
Non sono disponibili altre informazioni.
- **Utilizzazione della Sostanza / del Preparato** Prodotti chimici per laboratorio
- **1.3 Informazioni sul fornitore della scheda di dati di sicurezza**
- **Produttore/fornitore:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- **Società Italiana Chimici**
Via Rio Nell Ellba 140
00138 Rome, Italy
Tel: 39 06 8800211
Fax: 39 30 06 8815313
Web: www.sichim.com
- **Informazioni fornite da:** Product safety department
- **1.4 Numero telefonico di emergenza:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

SEZIONE 2: Identificazione dei pericoli

- **2.1 Classificazione della sostanza o della miscela**
- **Classificazione secondo il regolamento (CE) n. 1272/2008**



GHS02 fiamma

Flam. Liq. 2 H225 Liquido e vapori facilmente infiammabili.



GHS08 pericolo per la salute

Resp. Sens. 1B H334 Può provocare sintomi allergici o asmatici o difficoltà respiratorie se inalato.

Muta. 2 H341 Sospettato di provocare alterazioni genetiche.

STOT SE 2 H371 Può provocare danni agli organi.



GHS05 corrosione

Met. Corr.1 H290 Può essere corrosivo per i metalli.



GHS09 ambiente

Aquatic Acute 1 H400 Molto tossico per gli organismi acquatici.

(continua a pagina 2)

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 14.04.2017

Revisione: 14.04.2017

Denominazione commerciale: **EHRlich'S HEMATOXYLIN**

(Segue da pagina 1)



GHS07

- Acute Tox. 4 H302 Nocivo se ingerito.
 Acute Tox. 4 H332 Nocivo se inalato.
 Skin Irrit. 2 H315 Provoca irritazione cutanea.
 Skin Sens. 1B H317 Può provocare una reazione allergica cutanea.

· **2.2 Elementi dell'etichetta**

· **Etichettatura secondo il regolamento (CE) n. 1272/2008**

Il prodotto è classificato ed etichettato conformemente al regolamento CLP.

· **Pittogrammi di pericolo**



GHS02 GHS05 GHS07 GHS08 GHS09

· **Avvertenza Pericolo**

· **Componenti pericolosi che ne determinano l'etichettatura:**
metanolo

· **Indicazioni di pericolo**

- H225 Liquido e vapori facilmente infiammabili.
 H290 Può essere corrosivo per i metalli.
 H302+H332 Nocivo se ingerito o inalato.
 H315 Provoca irritazione cutanea.
 H334 Può provocare sintomi allergici o asmatici o difficoltà respiratorie se inalato.
 H317 Può provocare una reazione allergica cutanea.
 H341 Sospettato di provocare alterazioni genetiche.
 H371 Può provocare danni agli organi.
 H400 Molto tossico per gli organismi acquatici.

· **Consigli di prudenza**

- P210 Tenere lontano da fonti di calore, superfici calde, scintille, fiamme libere o altre fonti di accensione. Non fumare.
 P241 Utilizzare impianti elettrici/di ventilazione/d'illuminazione/a prova di esplosione.
 P303+P361+P353 **IN CASO DI CONTATTO CON LA PELLE (o con i capelli):** togliere immediatamente tutti gli indumenti contaminati. Sciacquare la pelle/fare una doccia.
 P321 Trattamento specifico (vedere su questa etichetta).
 P405 Conservare sotto chiave.
 P501 Smaltire il prodotto/recipiente in conformità con le disposizioni locali / regionali / nazionali / internazionali.

· **2.3 Altri pericoli**

· **Risultati della valutazione PBT e vPvB**

- **PBT:** Non applicabile.
 · **vPvB:** Non applicabile.

SEZIONE 3: Composizione/informazioni sugli ingredienti

· **3.2 Caratteristiche chimiche: Miscela**

- **Descrizione:** Miscela delle seguenti sostanze con additivi non pericolosi.

(continua a pagina 3)

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 14.04.2017

Revisione: 14.04.2017

Denominazione commerciale: EHRlich'S HEMATOXYLIN

(Segue da pagina 2)

· Sostanze pericolose:		
CAS: 56-81-5 EINECS: 200-289-5	glicerolo sostanza con un limite comunitario di esposizione sul posto di lavoro	25-50%
CAS: 64-17-5 EINECS: 200-578-6	etanolo ⚠ Flam. Liq. 2, H225	25-50%
CAS: 64-19-7 EINECS: 200-580-7	acido acetico ⚠ Flam. Liq. 3, H226; ⚠ Skin Corr. 1A, H314	2,5-10%
CAS: 67-56-1 EINECS: 200-659-6	metanolo ⚠ Flam. Liq. 2, H225; ⚠ STOT SE 1, H370; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	≤ 2,5%

· **Ulteriori indicazioni:** Il testo dell'avvertenza dei pericoli citati può essere appreso dal capitolo 16

SEZIONE 4: Misure di primo soccorso

· **4.1 Descrizione delle misure di primo soccorso**

· **Indicazioni generali:**

I sintomi di avvelenamento possono comparire dopo molte ore, per tale motivo è necessaria la sorveglianza di un medico nelle 48 ore successive all'incidente.

· **Inalazione:**

Portare il soggetto in zona molto ben areata e per sicurezza consultare un medico.

Se il soggetto è svenuto provvedere a tenerlo durante il trasporto in posizione stabile su un fianco.

· **Contatto con la pelle:** Lavare immediatamente con acqua e sapone sciacquando accuratamente.

· **Contatto con gli occhi:**

Lavare con acqua corrente per diversi minuti tenendo le palpebre ben aperte. Se persiste il dolore consultare il medico.

· **Ingestione:** Chiamare subito il medico.

· **4.2 Principali sintomi ed effetti, sia acuti che ritardati** Non sono disponibili altre informazioni.

· **4.3 Indicazione dell'eventuale necessità di consultare immediatamente un medico e di trattamenti speciali** Non sono disponibili altre informazioni.

SEZIONE 5: Misure antincendio

· **5.1 Mezzi di estinzione**

· **Mezzi di estinzione idonei:**

CO₂, polvere o acqua nebulizzata. Estinguere gli incendi di grosse dimensioni con acqua nebulizzata o con schiuma resistente all'alcool.

· **5.2 Pericoli speciali derivanti dalla sostanza o dalla miscela** Non sono disponibili altre informazioni.

· **5.3 Raccomandazioni per gli addetti all'estinzione degli incendi**

· **Mezzi protettivi specifici:** Indossare il respiratore.

SEZIONE 6: Misure in caso di rilascio accidentale

· **6.1 Precauzioni personali, dispositivi di protezione e procedure in caso di emergenza**

Indossare equipaggiamento protettivo. Allontanare le persone non equipaggiate.

· **6.2 Precauzioni ambientali:**

In caso di infiltrazione nei corpi d'acqua o nelle fognature avvertire le autorità competenti.

Diluire abbondantemente con acqua.

Impedire infiltrazioni nella fognatura/nelle acque superficiali/nelle acque freatiche.

· **6.3 Metodi e materiali per il contenimento e per la bonifica:**

Raccogliere il liquido con materiale assorbente (sabbia, tripoli, legante di acidi, legante universale, segatura).

(continua a pagina 4)

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 14.04.2017

Revisione: 14.04.2017

Denominazione commerciale: EHRlich'S HEMATOXYLIN

(Segue da pagina 3)

Smaltimento del materiale contaminato conformemente al punto 13.

Provvedere ad una sufficiente areazione.

· 6.4 Riferimento ad altre sezioni

Per informazioni relative ad una manipolazione sicura, vedere capitolo 7.

Per informazioni relative all'equipaggiamento protettivo ad uso personale vedere Capitolo 8.

Per informazioni relative allo smaltimento vedere Capitolo 13.

SEZIONE 7: Manipolazione e immagazzinamento

· 7.1 Precauzioni per la manipolazione sicura

Accurata ventilazione/aspirazione nei luoghi di lavoro.

Evitare la formazione di aerosol.

· Indicazioni in caso di incendio ed esplosione:

Tenere lontano da fonti di calore, non fumare.

Proteggere dal calore.

Adottare provvedimenti contro cariche elettrostatiche.

· 7.2 Condizioni per lo stoccaggio sicuro, comprese eventuali incompatibilità

· Stoccaggio:

· Requisiti dei magazzini e dei recipienti: Conservare in ambiente fresco.

· Indicazioni sullo stoccaggio misto: Non necessario.

· Ulteriori indicazioni relative alle condizioni di immagazzinamento:

Mantenere i recipienti ermeticamente chiusi.

Conservare in luogo fresco e asciutto in fusti ben chiusi.

Proteggere dal calore e dai raggi diretti del sole.

· 7.3 Usi finali particolari Non sono disponibili altre informazioni.

SEZIONE 8: Controllo dell'esposizione/protezione individuale

· Ulteriori indicazioni sulla struttura di impianti tecnici: Nessun dato ulteriore, vedere punto 7.

· 8.1 Parametri di controllo

· Componenti i cui valori limite devono essere tenuti sotto controllo negli ambienti di lavoro:

56-81-5 glicerolo

TWA Valore a lungo termine: (10) mg/m³

64-17-5 etanolo

TWA Valore a breve termine: 1884 mg/m³, 1000 ppm

A3

64-19-7 acido acetico

TWA Valore a breve termine: 37 mg/m³, 15 ppm

Valore a lungo termine: 25 mg/m³, 10 ppm

67-56-1 metanolo

TWA Valore a breve termine: 328 mg/m³, 250 ppm

Valore a lungo termine: 262 mg/m³, 200 ppm

Cute, IBE

VL Valore a lungo termine: 260 mg/m³, 200 ppm

Pelle

(continua a pagina 5)

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 14.04.2017

Revisione: 14.04.2017

Denominazione commerciale: EHRlich'S HEMATOXYLIN

(Segue da pagina 4)

· Componenti con valori limite biologici:**67-56-1 metanolo**

IBE	15 mg/l Campioni: urine Momento del prelievo: a fine turno Indicatore biologico: metanolo
------------	--

· **Ulteriori indicazioni:** Le liste valide alla data di compilazione sono state usate come base.

· **8.2 Controlli dell'esposizione**

· **Mezzi protettivi individuali:**

· **Norme generali protettive e di igiene del lavoro:**

- Tenere lontano da cibo, bevande e foraggi.
- Togliere immediatamente gli abiti contaminati.
- Lavarsi le mani prima dell'intervallo o a lavoro terminato.
- Evitare il contatto con gli occhi e la pelle.

· **Maschera protettiva:**

Nelle esposizioni brevi e minime utilizzare la maschera; nelle esposizioni più intense e durature indossare l'autorespiratore.

· **Guanti protettivi:**



Guanti protettivi

Il materiale dei guanti deve essere impermeabile e stabile contro il prodotto/ la sostanza/ la formulazione.

A causa della mancanza di tests non può essere consigliato alcun tipo di materiale per i guanti con cui manipolare il prodotto / la formulazione / la miscela di sostanze chimiche.

Scelta del materiale dei guanti in considerazione dei tempi di passaggio, dei tassi di permeazione e della degradazione.

· **Materiale dei guanti**

La scelta dei guanti adatti non dipende soltanto dal materiale bensì anche da altre caratteristiche di qualità variabili da un produttore a un altro. Poiché il prodotto rappresenta una formulazione di più sostanze, la stabilità dei materiali dei guanti non è calcolabile in anticipo e deve essere testata prima dell'impiego

· **Tempo di permeazione del materiale dei guanti**

Richiedere dal fornitore dei guanti il tempo di passaggio preciso il quale deve essere rispettato.

· **Occhiali protettivi:**



Occhiali protettivi a tenuta

SEZIONE 9: Proprietà fisiche e chimiche

· **9.1 Informazioni sulle proprietà fisiche e chimiche fondamentali**

· **Indicazioni generali**

· **Aspetto:**

Forma:	Soluzione
Colore:	Marrone scuro
Odore:	Simile all'alcool
Soglia olfattiva:	Non definito.

· **valori di pH:** Non definito.

(continua a pagina 6)

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 14.04.2017

Revisione: 14.04.2017

Denominazione commerciale: **EHRlich'S HEMATOXYLIN**

(Segue da pagina 5)

· Cambiamento di stato Punto di fusione/punto di congelamento:	Non definito.
Punto di ebollizione iniziale e intervallo di ebollizione:	78 °C
· Punto di infiammabilità:	17 °C
· Infiammabilità (solidi, gas):	Non applicabile.
· Temperatura di accensione:	400 °C
· Temperatura di decomposizione:	Non definito.
· Temperatura di autoaccensione:	Prodotto non autoinfiammabile.
· Proprietà esplosive:	Prodotto non è esplosivo, è tuttavia possibile la formazione di miscele di vapori/aria esplosive.
· Limiti di infiammabilità: Inferiore:	0,9 Vol %
Superiore:	15,0 Vol %
· Tensione di vapore a 20 °C:	59 hPa
· Densità:	Non definito.
· Densità relativa	Non definito.
· Densità di vapore:	Non definito.
· Velocità di evaporazione	Non definito.
· Solubilità in/Miscibilità con acqua:	Completamente miscibile.
· Coefficiente di ripartizione: n-ottanolo/acqua:	Non definito.
· Viscosità: Dinamica:	Non definito.
Cinematica:	Non definito.
· Tenore del solvente: Solventi organici:	66,0 %
VOC (CE)	33,80 %
· 9.2 Altre informazioni	Non sono disponibili altre informazioni.

SEZIONE 10: Stabilità e reattività

- **10.1 Reattività** Non sono disponibili altre informazioni.
- **10.2 Stabilità chimica**
- **Decomposizione termica/ condizioni da evitare:** Il prodotto non si decompone se utilizzato secondo le norme.
- **10.3 Possibilità di reazioni pericolose** Non sono note reazioni pericolose.
- **10.4 Condizioni da evitare** Non sono disponibili altre informazioni.
- **10.5 Materiali incompatibili:** Non sono disponibili altre informazioni.
- **10.6 Prodotti di decomposizione pericolosi:** Non sono noti prodotti di decomposizione pericolosi.

(continua a pagina 7)

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 14.04.2017

Revisione: 14.04.2017

Denominazione commerciale: **EHRlich'S HEMATOXYLIN**

(Segue da pagina 6)

SEZIONE 11: Informazioni tossicologiche

· **11.1 Informazioni sugli effetti tossicologici**

· **Tossicità acuta**

Nocivo se ingerito o inalato.

· **Valori LD/LC50 rilevanti per la classificazione:**

67-56-1 metanolo

Orale	LD50	5628 mg/kg (rat)
Cutaneo	LD50	15800 mg/kg (rabbit)

· **Irritabilità primaria:**

· **Corrosione/irritazione cutanea**

Provoca irritazione cutanea.

· **Lesioni oculari gravi/irritazioni oculari gravi**

Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.

· **Sensibilizzazione respiratoria o cutanea**

Può provocare sintomi allergici o asmatici o difficoltà respiratorie se inalato.

Può provocare una reazione allergica cutanea.

· **Effetti CMR (cancerogenicità, mutagenicità e tossicità per la riproduzione)**

· **Mutagenicità delle cellule germinali**

Sospettato di provocare alterazioni genetiche.

· **Cancerogenicità** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.

· **Tossicità per la riproduzione** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.

· **Tossicità specifica per organi bersaglio (STOT) - esposizione singola**

Può provocare danni agli organi.

· **Tossicità specifica per organi bersaglio (STOT) - esposizione ripetuta**

Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.

· **Pericolo in caso di aspirazione** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.

SEZIONE 12: Informazioni ecologiche

· **12.1 Tossicità**

· **Tossicità acquatica:** Non sono disponibili altre informazioni.

· **12.2 Persistenza e degradabilità** Non sono disponibili altre informazioni.

· **12.3 Potenziale di bioaccumulo** Non sono disponibili altre informazioni.

· **12.4 Mobilità nel suolo** Non sono disponibili altre informazioni.

· **Effetti tossici per l'ambiente:**

· **Osservazioni:** Molto tossico per i pesci.

· **Ulteriori indicazioni in materia ambientale:**

· **Ulteriori indicazioni:**

Pericolosità per le acque classe 1 (D) (Autoclassificazione): poco pericoloso

Non immettere nelle acque freatiche, nei corsi d'acqua o nelle fognature non diluito o in grandi quantità.

Tossico per pesci e plancton.

Molto tossico per gli organismi acquatici

· **12.5 Risultati della valutazione PBT e vPvB**

· **PBT:** Non applicabile.

· **vPvB:** Non applicabile.

· **12.6 Altri effetti avversi** Non sono disponibili altre informazioni.

IT

(continua a pagina 8)

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 14.04.2017

Revisione: 14.04.2017

Denominazione commerciale: **EHRlich'S HEMATOXYLIN**

(Segue da pagina 7)

SEZIONE 13: Considerazioni sullo smaltimento

- **13.1 Metodi di trattamento dei rifiuti**
- **Consigli:** Non smaltire il prodotto insieme ai rifiuti domestici Non immettere nelle fognature.
- **Imballaggi non puliti:**
- **Consigli:** Smaltimento in conformità con le disposizioni amministrative.
- **Detergente consigliato:** Acqua eventualmente con l'aggiunta di detersivi.

SEZIONE 14: Informazioni sul trasporto

- | | |
|---|--|
| · 14.1 Numero ONU
· ADR, IMDG, IATA | UN1987 |
| · 14.2 Nome di spedizione dell'ONU
· ADR

· IMDG

· IATA | 1987 ALCOLI, N.A.S. (ETANOLO (ALCOL ETILICO), METANOLO), PERICOLOSO PER L'AMBIENTE
ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL)
ALCOHOLS, N.O.S. (ETHANOL, METHANOL) |
| · 14.3 Classi di pericolo connesso al trasporto

· ADR | |
|  | |
| · Classe
· Etichetta | 3 Liquidi infiammabili
3 |
| · IMDG, IATA | |
|  | |
| · Class
· Label | 3 Liquidi infiammabili
3 |
| · 14.4 Gruppo di imballaggio
· ADR, IMDG, IATA | II |
| · 14.5 Pericoli per l'ambiente:
· Marcatura speciali (ADR): | Simbolo (pesce e albero) |
| · 14.6 Precauzioni speciali per gli utilizzatori
· Numero Kemler:
· Numero EMS:
· Stowage Category | Attenzione: Liquidi infiammabili
33
F-E,S-D
B |
| · 14.7 Trasporto di rinfuse secondo l'allegato II di MARPOL ed il codice IBC | Non applicabile. |

(continua a pagina 9)

IT

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 14.04.2017

Revisione: 14.04.2017

Denominazione commerciale: EHRlich'S HEMATOXYLIN

(Segue da pagina 8)

· Trasporto/ulteriori indicazioni:**· ADR****· Quantità limitate (LQ)**

1L

· Quantità esenti (EQ)

Codice: E2

Quantità massima netta per imballaggio interno: 30 ml

Quantità massima netta per imballaggio esterno: 500 ml

· Categoria di trasporto

2

· Codice di restrizione in galleria

D/E

· IMDG**· Limited quantities (LQ)**

1L

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· UN "Model Regulation":

UN 1987 ALCOLI, N.A.S. (ETANOLO (ALCOL ETILICO), METANOLO), 3, II, PERICOLOSO PER L'AMBIENTE

SEZIONE 15: Informazioni sulla regolamentazione**· 15.1 Disposizioni legislative e regolamentari su salute, sicurezza e ambiente specifiche per la sostanza o la miscela****· Direttiva 2012/18/UE****· Sostanze pericolose specificate - ALLEGATO I metanolo****· Categoria Seveso**

E1 Pericoloso per l'ambiente acquatico

P5c LIQUIDI INFIAMMABILI

· Quantità limite (tonnellate) ai fini dell'applicazione dei requisiti di soglia inferiore 100 t**· Quantità limite (tonnellate) ai fini dell'applicazione dei requisiti di soglia superiore 200 t****· REGOLAMENTO (CE) n. 1907/2006 ALLEGATO XVII Restrizioni: 3****· Disposizioni nazionali:****· Istruzione tecnica aria:**

Classe	quota in %
NC	66,0

· 15.2 Valutazione della sicurezza chimica: Una valutazione della sicurezza chimica non è stata effettuata.**SEZIONE 16: Altre informazioni**

I dati sono riportati sulla base delle nostre conoscenze attuali, non rappresentano tuttavia alcuna garanzia delle caratteristiche del prodotto e non motivano alcun rapporto giuridico contrattuale.

· Frasi rilevanti

H225 Liquido e vapori facilmente infiammabili.

H226 Liquido e vapori infiammabili.

H302 Nocivo se ingerito.

H312 Nocivo per contatto con la pelle.

H314 Provoca gravi ustioni cutanee e gravi lesioni oculari.

H315 Provoca irritazione cutanea.

H332 Nocivo se inalato.

H370 Provoca danni agli organi.

(continua a pagina 10)

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 14.04.2017

Revisione: 14.04.2017

Denominazione commerciale: EHRlich'S HEMATOXYLIN

(Segue da pagina 9)

· Abbreviazioni e acronimi:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Liquidi infiammabili – Categoria 2

Flam. Liq. 3: Liquidi infiammabili – Categoria 3

Met. Corr.1: Sostanze o miscele corrosive per i metalli – Categoria 1

Acute Tox. 4: Tossicità acuta – Categoria 4

Skin Corr. 1A: Corrosione/irritazione della pelle – Categoria 1A

Skin Irrit. 2: Corrosione/irritazione della pelle – Categoria 2

Resp. Sens. 1B: Sensibilizzazione delle vie respiratorie – Categoria 1B

Skin Sens. 1B: Sensibilizzazione della pelle – Categoria 1B

Muta. 2: Mutagenicità sulle cellule germinali – Categoria 2

STOT SE 1: Tossicità specifica per organi bersaglio (esposizione singola) – Categoria 1

STOT SE 2: Tossicità specifica per organi bersaglio (esposizione singola) – Categoria 2

Aquatic Acute 1: Pericoloso per l'ambiente acquatico - pericolo acuto per l'ambiente acquatico – Categoria 1

製品安全データシート

JIS Z7253 による分類

印刷日: 2017.04.14

改訂日: 2017.04.14

1 化学物質等及び会社情報

- ・ 製品識別子
- ・ 商品名: EHRlich'S HEMATOXYLIN
- ・ 製品番号: 26040-05, 26753-01, 26040-06
- ・ 該当純物質または混合物の関連特定用途及び使用禁止用途 追加的な関連情報は得られていません。
- ・ 成分の利用/調合 実験用化学物質
- ・ 安全データシートの供給元の詳細情報
- ・ 製造者/納入者:
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkck@aol.com
www.emsdiasum.com
- ・ この他の情報問い合わせ先: Product safety department
- ・ 緊急通報用電話番号:
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 危険有害性の要約

・ 純物質または混合物の分類



火炎

引火性液体 区分2

H225 引火性の高い液体及び蒸気



健康に危険

感受性(呼吸器) 区分1B

H334 吸入するとアレルギー, ぜん(喘)息又は呼吸困難を起こすおそれ

生殖細胞変異原性 区分2

H341 遺伝性疾患のおそれの疑い

特定標的臓器有害性(単回暴露) 区分2 H371 臓器の障害のおそれ



腐食

金属腐食性物質 区分1

H290 金属腐食のおそれ



環境

水生環境有害性(急性毒性) 区分1

H400 水生生物に非常に強い毒性



急性毒性(経口) 区分4

H302 飲み込むと有害

急性毒性(吸入) 区分4

H332 吸入すると有害

皮膚腐食性/刺激性 区分2

H315 皮膚刺激

(2ページに続く)

製品安全データシート

JIS Z7253 による分類

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商品名: EHRlich'S HEMATOXYLIN

(1ページの続き)

重篤な眼の損傷性/眼刺激性 区分2A H319 強い眼刺激
 感受性(皮膚) 区分1B H317 アレルギー性皮膚反応を起こすおそれ

ラベル要素

GHS ラベル要素

本製品はGHS(化学品の分類および表示に関する世界調和システム)により分類及び表示されています。

危険図表



GHS02 GHS05 GHS07 GHS08 GHS09

表示語 危険

危険と定められた成分をラベル表示:

Methyl Alcohol

危険文句

引火性の高い液体及び蒸気
 金属腐食のおそれ
 飲み込んだり, 吸入すると有害
 皮膚刺激
 強い眼刺激
 吸入するとアレルギー, ぜん(喘)息又は呼吸困難を起こすおそれ
 アレルギー性皮膚反応を起こすおそれ
 遺伝性疾患のおそれの疑い
 臓器の障害のおそれ
 水生生物に非常に強い毒性

注意文句

熱/火花/裸火/高温のもののような着火源から遠ざけること。 - 禁煙。
 皮膚(または髪)に付着した場合: 直ちに汚染された衣類をすべて脱ぐこと。皮膚を流水 / シャワーで洗うこと。
 眼に入った場合: 水で数分間注意深く洗うこと。次にコンタクトレンズを着用していて容易に外せる場合は外すこと。その後も洗浄を続けること。
 特別な処置が必要である(このラベルのを見よ)。
 施錠して保管すること。
 現地/地域/国/国際規定に従い内容物・容器の露出

その他の危険性

- ・PBT (残留性、生物濃縮性、毒性物質) 及び vPvB (高残留性、高生物濃縮性物質) アセスメント
- ・PBT (残留性、生物濃縮性、毒性物質): 情報なし
- ・vPvB (高残留性、高生物濃縮性物質): 情報なし

3 組成・成分情報

- ・化学的特性: 混合物
- ・説明: 危険のない混ぜ合わせかたをした以下成分からなる混合物

危険な含有成分:

64-17-5	Ethyl Alcohol, denatured	25-50%
	引火性液体 区分2, H225	

(3ページに続く)

製品安全データシート

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(2ページの続き)

64-19-7	Acetic Acid Glacial ⚠ 引火性液体 区分3, H226; ⚠ 皮膚腐食性/刺激性 区分1A, H314	2.5-10%
67-56-1	Methyl Alcohol ⚠ 引火性液体 区分2, H225; ⚠ 特定標的臓器有害性(単回暴露) 区分1, H370; ⚠ 急性毒性(経口) 区分4, H302; ⚠ 急性毒性(経皮) 区分4, H312; ⚠ 急性毒性(吸入) 区分4, H332; 重篤な眼の損傷性/眼刺激性 区分2B, H320	≤ 2.5%

4 応急措置

- ・ 応急手当処置に関する説明
- ・ 一般情報:
中毒症状は時間がかかり経過した後に現れる場合もあるため、事故後最低 4 8 時間は医師の監視のもとで過ごすこと
- ・ 吸い込んだ場合:
外気を十分に送り込み、安全のため医師を呼ぶ
意識不明の場合には安定させた状態で横向きに寝かせ、移送する
- ・ 皮膚が触れた場合: 即刻石鹼と水で洗い、よくすすぐ
- ・ 眼に入った場合:
瞼を開けたまま、流水で何分間か眼をすすぎ、状態がよくなる場合には医者に相談する
- ・ 飲み込んだ場合: 即医者を呼ぶ
- ・ 医師への指示事項:
最も重要な急性及び慢性の症状及び影響 追加的な関連情報は得られていません。
何らかの即時医療処置及び特別治療の必要性を示す兆候 追加的な関連情報は得られていません。

5 火災時の措置

- ・ 消火剤
- ・ 適切な消火剤:
CO₂, 消火粉末剤あるいは水放射。火が大きい場合には水放射もしくは耐アルコール性泡を使用
- ・ 本化学物質または混合物から発生する特別な危険性 追加的な関連情報は得られていません。
- ・ 消防士向けアドバイス
- ・ 特別な保護装備: 呼吸保護マスクを着用

6 漏出時の措置

- ・ 個人的予防措置、保護具及び応急処置法 防護服を着用。防護服を着用していない人は近づけない
- ・ 環境関連予防措置:
河川、下水処理施設に流れ込んだ場合には関係当局に連絡する
大量の水で薄める
下水処理施設、地上水あるいは地下水に達しないようにする
- ・ 封じ込め及び浄化のための方法及び材料:
液体吸収材(砂、珪藻土、酸結合剤、ユニバーサル結合剤、おがくず)で吸収する
13 項に下がい汚染材は廃棄物として処理する
十分な換気を心がける
- ・ 他のセクションへの言及
安全な取り扱い方に関しては 7 項を参照
人の保護装備の情報に関しては 8 項を参照
廃棄処分に関しては 13 項参照

JP

(4ページに続く)

製品安全データシート

JIS Z7253 による分類

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商品名: EHRlich'S HEMATOXYLIN

(3ページの続き)

7 取扱い・保管上の注意

- ・ **取り扱い方:**
- ・ **安全操作のための予防措置**
作業場では十分な換気、埃を吸い取るよう心がける
エアゾールの発生を防ぐ
- ・ **火災および爆発防止に関する注意事項:**
発火元は遠ざける。禁煙
高温から保護する
静電荷を防ぐ措置をほどこす
- ・ **混融危険性を含めた安全貯蔵条件**
- ・ **保管:**
- ・ **保管スペースおよび容器に関する要求事項:** 涼しい場所に保管する
- ・ **同じ場所に保管する際の注意事項:** 必要ない
- ・ **保管条件に関するその他の注意事項:**
容器は密閉した状態に保つ
よく密閉した樽の中で涼しく乾燥した場所に保管する
熱および直射日光は避ける
- ・ **特定の最終用途** 追加的な関連情報は得られていません。

8 暴露防止及び保護措置

- ・ **技術設備の形体に関する追加注意事項:** その他の申し立てなし、7項参照
- ・ **管理パラメーター**

- ・ **作業場において限界値の監視を要する成分:**

64-19-7 Acetic Acid Glacial

OEL | 長期値: 25 mg/m³, 10 ppm

67-56-1 Methyl Alcohol

OEL | 長期値: 260 mg/m³, 200 ppm

- ・ **生物学的許容値**

67-56-1 Methyl Alcohol

OEL-B | 20 mg/l
試料: urine
試料採取時期: End of shift
物質: Methanol

- ・ **追加注意事項:** 生成時に有効なリストがもとなっている
- ・ **暴露管理**
- ・ **人的保護装備:**
- ・ **一般防止措置および衛生措置:**
食物、飲み物、飼料からは遠ざける
汚れのしみ込んだ衣類は即刻脱ぐ
休憩の前、作業終了後には手を洗う
眼に入らないよう、また皮膚に接触しないよう注意する
- ・ **呼吸保護器具:**
短時間もしくは負担が小さい場合には呼吸フィルター付装置を、集中的にあるいは長時間触れる場合には、酸素ボンベ付き呼吸保護装備を使用すること

(5ページに続く)

製品安全データシート

JIS Z7253 による分類

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改訂日: 2017.04.14

商品名: EHRlich'S HEMATOXYLIN

(4ページの続き)

手の保護:



保護手袋

手袋の材質は物質/材料/調合剤に対して耐性であり、成分を通すことがあってはならない
テストをおこなっていないため、物質/調合剤/化合物を取り扱う際の手袋の材質として勧められるもの
はない

浸透時間、透過性および劣化の点を留意しながら手袋の材質を選択する

手袋材

適当な手袋は材質だけではなく、その他の品質によっても変わり、各メーカーによって異なる。調合する際の物質は複数の成分から生成されるため、手袋材の耐久性は予想できない。このため使用前には必ずチェックしなければならない

手袋材の浸透時間 正確な浸透時間については保護手袋メーカーに問い合わせ、それを遵守すること

眼の保護:



密閉式保護めがね

9 物理的及び化学的性質

基本的な物理及び化学特性に関する情報

一般指示事項

外観

形: 溶剤
色: ダークブラウン
におい: アルコールのような
嗅覚閾値: 決まっていない。

pH-値: 決まっていない。

状態の変化

融点/融解範囲: 決まっていない
沸点/沸点範囲: 78 °C

引火点: 17 °C

発火性(個体、気体): 情報なし

発火温度: 400 °C

分解温度: 決まっていない。

自然発火性: プロダクトは自然発火しない

爆発の危険: プロダクトは爆発する危険はない。ただし爆発する危険のある蒸気と空気の混合物を形成する可能性はある

爆発限界:

下限: 0.9 Vol %
上限: 15.0 Vol %

蒸気圧 約 20 °C: 59 hPa

密度: 決まっていない
相対的密度: 決まっていない。

(6ページに続く)

製品安全データシート

JIS Z7253 による分類

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改訂日: 2017.04.14

商品名: EHRlich'S HEMATOXYLIN

(5ページの続き)

・蒸気密度	決まっていない。
・気化速度	決まっていない。
・以下成分における消和性/との混和性	
水:	完全に混合できる
・分配係数 (n-オクタノール/水):	決まっていない。
・粘性:	
力学的:	決まっていない。
運動性:	決まっていない。
・溶剤含有量:	
有機溶剤:	66.0 %
・他の情報	追加的な関連情報は得られていません。

10 安定性及び反応性

- ・反応性 追加的な関連情報は得られていません。
- ・化学的安定性
- ・熱分解/回避すべき条件: 規定どおりの使用では分解しない
- ・危険反応の可能性 危険な反応は起きていない
- ・避けるべき条件 追加的な関連情報は得られていません。
- ・不適合物質: 追加的な関連情報は得られていません。
- ・危険な分解生成物: 危険な分解プロダクトはない

11 有害性情報

- ・毒性学的影響に関する情報
- ・急性毒性:

・分類上の LD/LC50 値:

67-56-1 Methyl Alcohol

口	LD50	5628 mg/kg (rat)
皮膚	LD50	15800 mg/kg (rabbit)

- ・初期刺激作用:
- ・皮膚において: 皮膚と粘膜を刺激
- ・眼において: 刺激作用
- ・感作作用:
- 吸い込むことで感作作用がある場合あり
- 皮膚接触によって感作作用の可能性あり
- ・毒性に関する補足注意事項:
- 調査に関する E U の最新の一般分類ガイドラインの計算によれば、プロダクトでは以下の危険が見込まれる
- 毒性がある
- 刺激的
- ・次の種類の潜在的な効果に対する情報
- ・CMR-作用 (癌誘発、因子変異、そして進化危険作用)
- 生殖細胞変異原性 区分2

JP

(7ページに続く)

製品安全データシート

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商品名: EHRlich'S HEMATOXYLIN

(6ページの続き)

12 環境影響情報

- ・ **毒性**
- ・ **水生生物に対する毒性:** 追加的な関連情報は得られていません。
- ・ **持続性及び分解性** 追加的な関連情報は得られていません。
- ・ **環境システムにおける作用:**
- ・ **生体内蓄積能** 追加的な関連情報は得られていません。
- ・ **土壌内移動性** 追加的な関連情報は得られていません。
- ・ **生態毒性作用:**
- ・ **注:** 魚類に対して毒性が非常に高い
- ・ **その他のエコロジーに関する注意事項:**
- ・ **一般注意事項:**
水への危険度分類 1 (ドイツの規定) (自己査定): 水に対する危険性はわずかにある
薄めずに、あるいは大量に地下水、河川もしくは下水施設に流してはならない
水域においては魚やプランクトンにも毒性がある
水生生物にとり非常に毒性が高い
- ・ **PBT (残留性、生物濃縮性、毒性物質) 及び vPvB (高残留性、高生物濃縮性物質) アセスメント**
- ・ **PBT (残留性、生物濃縮性、毒性物質):** 情報なし
- ・ **vPvB (高残留性、高生物濃縮性物質):** 情報なし
- ・ **他の副作用** 追加的な関連情報は得られていません。

13 廃棄上の注意

- ・ **廃棄物処理方法**
- ・ **勧告:** 家庭ごみとはいっしょに処分できない。下水処理施設に流してはならない
- ・ **洗浄されていないパッケージ:**
- ・ **勧告:** 関係当局の規則に従って処分する
- ・ **推薦する洗剤:** 水、場合に応じて洗剤も使って

14 輸送上の注意

- | | |
|---|--|
| ・ UN 番号 | UN1987 |
| ・ ADR, IMDG, IATA | |
| ・ 国連出荷正式名 | |
| ・ ADR | 1987 ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL), ENVIRONMENTALLY HAZARDOUS |
| ・ IMDG | ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL) |
| ・ IATA | ALCOHOLS, N.O.S. (ETHANOL, METHANOL) |
| ・ 輸送の危険性クラス | |
| ・ ADR | |
|   | |
| ・ 分類 | 3 可燃性液体成分 |

(8ページに続く)

製品安全データシート

JIS Z7253 による分類

印刷日: 2017.04.14

改訂日: 2017.04.14

商品名: EHRlich'S HEMATOXYLIN

(7ページの続き)

・危険物ラベル	3
・IMDG, IATA	
	
・Class	3 可燃性液体成分
・Label	3
・パッケージの分類	
・ADR, IMDG, IATA	II
・環境危険:	
・特別マーキング (ADR):	シンボル (魚やツリ)
・ユーザー用特別予防措置	警告: 可燃性液体成分
・ケムラー符号:	33
・EMS (電子メールサービスナンバー) 番号:	F-E,S-D
・Stowage Category	B
・マルポール条約 (MARPOL73/78) 付属書II及びIBCコードに準じたバルク輸送	情報なし
・輸送/その他の説明:	
・ADR	
・Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
・IMDG	
・Limited quantities (LQ)	1L
・Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
・UN "模範規制:	UN 1987 ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL), 3, II, ENVIRONMENTALLY HAZARDOUS

15 適用法令

- ・該当純物質または混合物に対する安全、衛生及び環境規制・法律
- ・化審法

・既存化学物質		
56-81-5	glycerol	2-242
64-17-5	Ethyl Alcohol, denatured	2-202
64-19-7	Acetic Acid Glacial	2-688
67-56-1	Methyl Alcohol	2-201
517-28-2	haematoxylin	5-3664
7681-55-2	ヨウ素酸ナトリウム	1-443

(9ページに続く)

製品安全データシート

JIS Z7253 による分類

印刷日: 2017.04.14

改訂日: 2017.04.14

商品名: EHRlich'S HEMATOXYLIN

(8ページの続き)

・ 特定化学物質

内容成分はリストアップされていない

・ 監視化学物質、旧第二種監視化学物質、旧第三種監視化学物質

内容成分はリストアップされていない

・ 優先評価化学物質

67-56-1 Methyl Alcohol

・ 白物質

内容成分はリストアップされていない

・ 既存化学物質安全性点検結果 (分解性・蓄積性)

56-81-5 glycerol

64-17-5 Ethyl Alcohol, denatured

64-19-7 Acetic Acid Glacial

67-56-1 Methyl Alcohol

・ 既存化学物質安全性点検結果 (毒性)

内容成分はリストアップされていない

・ PRTR Class 1 designated substances

PRTR 制度 - 第一種指定化学物質

内容成分はリストアップされていない

・ PRTR Class 2 designated substances

PRTR 制度 - 第二種指定化学物質

内容成分はリストアップされていない

・ Poisonous and Deleterious Substances Control Act - Deleterious Substances

毒物及び劇物取締法 - 劇物

67-56-1 Methyl Alcohol

・ Poisonous and Deleterious Substances Control Act - Poisonous Substances

毒物及び劇物取締法 - 毒物

内容成分はリストアップされていない

・ Poisonous and Deleterious Substances Control Act - Specified Poisonous Substances

毒物及び劇物取締法 - 特定毒物

内容成分はリストアップされていない

・ 労働安全衛生法

・ 危険物

・ 爆発性の物 (施行令別表第 1 第 1 号)

内容成分はリストアップされていない

・ 発火性の物 (施行令別表第 1 第 2 号)

内容成分はリストアップされていない

・ 酸化性の物 (施行令別表第 1 第 3 号)

内容成分はリストアップされていない

・ 引火性の物 (施行令別表第 1 第 4 号)

64-17-5 Ethyl Alcohol, denatured

64-19-7 Acetic Acid Glacial

67-56-1 Methyl Alcohol

・ 可燃性のガス (施行令別表第 1 第 5 号)

内容成分はリストアップされていない

(10ページに続く)

製品安全データシート

JIS Z7253 による分類

印刷日: 2017.04.14

改訂日: 2017.04.14

商品名: EHRlich'S HEMATOXYLIN

(9ページの続き)

・特定化学物質等

・第一類物質

内容成分はリストアップされていない

・第二類物質

内容成分はリストアップされていない

・第三類物質

内容成分はリストアップされていない

・名称等を通知すべき有害物 (別表第9)

64-17-5	Ethyl Alcohol, denatured	61
64-19-7	Acetic Acid Glacial	176
67-56-1	Methyl Alcohol	560

・製造許可物質

内容成分はリストアップされていない

・鉛中毒予防規則 (施行令別表第4)

内容成分はリストアップされていない

・四アルキル鉛中毒予防規則 (施行令別表第5)

内容成分はリストアップされていない

・有機溶剤中毒予防規則第 (施行令別表第6の2)

・第一種有機溶剤等

内容成分はリストアップされていない

・第二種有機溶剤等

67-56-1 Methyl Alcohol

・第三種有機溶剤等

内容成分はリストアップされていない

・GHS ラベル要素

本製品はGHS(化学品の分類および表示に関する世界調和システム)により分類及び表示されています。

・危険図表



GHS02 GHS05 GHS07 GHS08 GHS09

・表示語 危険

・危険と定められた成分をラベル表示:

Methyl Alcohol

・危険文句

引火性の高い液体及び蒸気
 金属腐食のおそれ
 飲み込んだり, 吸入すると有害
 皮膚刺激
 強い眼刺激
 吸入するとアレルギー, ぜん(喘)息又は呼吸困難を起こすおそれ
 アレルギー性皮膚反応を起こすおそれ
 遺伝性疾患のおそれの疑い
 臓器の障害のおそれ
 水生生物に非常に強い毒性

(11ページに続く)

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(10ページの続き)

注意文句

- 熱/火花/裸火/高温のもののような着火源から遠ざけること。 - 禁煙。
- 皮膚（または髪）に付着した場合：直ちに汚染された衣類をすべて脱ぐこと。皮膚を流水 / シャワーで洗うこと。
- 眼に入った場合：水で数分間注意深く洗うこと。次にコンタクトレンズを着用していて容易に外せる場合は外すこと。その後も洗浄を続けること。
- 特別な処置が必要である（このラベルのを見よ）。
- 施錠して保管すること。
- 現地/地域/国/国際規定に従い内容物・容器の露出
- 化学物質の安全性評価: 化学物質安全性評価が遂行されていない

16 その他の情報

この情報は現在の我々の認識に基づいている。ただし、プロダクトの特性を保証するものではなく、また契約において法的根拠にはならない

縮約と二文字語:

- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- PRTR/化管法: 化学物質排出把握管理促進法
- 引火性液体 区分2: Flammable liquids – Category 2
- 引火性液体 区分3: Flammable liquids – Category 3
- 金属腐食性物質 区分1: Corrosive to metals – Category 1
- 急性毒性(経口) 区分4: Acute toxicity – Category 4
- 皮膚腐食性/刺激性 区分1A: Skin corrosion/irritation – Category 1A
- 皮膚腐食性/刺激性 区分2: Skin corrosion/irritation – Category 2
- 重篤な眼の損傷性/眼刺激性 区分2A: Serious eye damage/eye irritation – Category 2A
- 重篤な眼の損傷性/眼刺激性 区分2B: Serious eye damage/eye irritation – Category 2B
- 感作性(呼吸器) 区分1B: Respiratory sensitisation – Category 1B
- 感作性(皮膚) 区分1B: Skin sensitisation – Category 1B
- 生殖細胞変異原性 区分2: Germ cell mutagenicity – Category 2
- 特定標的臓器有害性(単回暴露) 区分1: Specific target organ toxicity (single exposure) – Category 1
- 特定標的臓器有害性(単回暴露) 区分2: Specific target organ toxicity (single exposure) – Category 2
- 水生環境有害性(急性毒性) 区分1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

물질안전보건자료 GHS에 따라

기압점: 2017.04.14

개정: 2017.04.14

1 화학제품과 회사에 관한 정보

- **제품 식별자**
- **제품명: EHRlich'S HEMATOXYLIN**
- **상품번호:** 26040-05, 26753-01, 26040-06
- **해당 순물질이나 혼합물의 관련 하위용도 및 사용금지용도** 추가적인 정보가 존재하지 않습니다.
- **제품의 권고 용도와 사용상의 제한:** 실험실화학품
- **안전데이터표(Safety Data Sheet)내 공급업체 관련 상세 정보**
- **제조사/수입자/유통업자 정보:**
 Electron Microscopy Sciences
 1560 Industry Road
 USA-Hatfield, PA 19440
 Tel: 215-412-8400 Fax: 215-412-8450
 email: sgkcck@aol.com
 www.emsdiasum.com
- **Samchang Commercial Co., Ltd.**
 Yeo Eui Do
 PO Box 1110
 Seoul, Korea
 Tel: 82 2 703 3040
 Fax: 82 2 717 3298
- **추가적인 정보 획득 가능:** Product safety department
- **비상연락 전화번호:**
 ChemTrec 1-800-424-9300 Contract CCN7661
 1-703-527-3887

2 유해성·위험성

· **순물질 또는 혼합물의 분류**



화염

인화성 액체 - 구분 2

H225 고인화성 액체 및 증기



건강에 위험

호흡기 과민성 - 구분 1

H334 흡입시 알레르기성 반응, 천식 또는 호흡 곤란을 일으킬 수 있음

생식세포 변이원성 - 구분 2

H341 유전적인 결함을 일으킬 것으로 의심됨

특정표적장기 독성 - 1회 노출 - 구분 2 H371 신체 중에 손상을 일으킬 수 있음



부식

금속부식성 물질 - 구분 1

H290 금속을 부식시킬 수 있음



환경

수생환경 유해성 - 급성 1

H400 수생생물에 매우 유독함

(2 쪽에 계속)

물질안전보건자료

GHS에 따라

기압점: 2017.04.14

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(1 쪽부터계속)



급성 독성 - 경구 - 구분 4	H302 삼키면 유해함
급성 독성 - 흡입 - 구분 4	H332 흡입하면 유해함
피부 부식성/피부 자극성 - 구분 2	H315 피부에 자극을 일으킴
심한 눈 손상성/눈 자극성 - 구분 2	H319 눈에 심한 자극을 일으킴
피부 과민성 - 구분 1	H317 알레르기성 피부 반응을 일으킬 수 있음

· 라벨표기 요소
· GHS 라벨 요소

본 제품은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.

· 그림문자



GHS02 GHS05 GHS07 GHS08 GHS09

· 신호어 위험

· 상표상에명확히위험성이표시된성분:

Methyl Alcohol

· 유해·위험 문구

- 고인화성 액체 및 증기
- 금속을 부식시킬 수 있음
- 삼키거나 흡입하면 유해함.
- 피부에 자극을 일으킴
- 눈에 심한 자극을 일으킴
- 흡입시 알레르기성 반응, 천식 또는 호흡 곤란을 일으킬 수 있음
- 알레르기성 피부 반응을 일으킬 수 있음
- 유전적인 결함을 일으킬 것으로 의심됨
- 신체 중에 손상을 일으킬 수 있음
- 수생생물에 매우 유독함

· 예방조치 문구

- 열·스파크·화염·고열로부터 멀리하시오 - 금연
- 피부(또는 머리카락)에 묻으면 오염된 모든 의복은 벗으시오. 피부를 물로 씻으시오/샤워하시오.
- 눈에 묻으면 몇 분간 물로 조심해서 씻으시오. 가능하면콘택트렌즈를 제거하시오. 계속 씻으시오.
- (라벨 참조) 처치를 하시오.
- 잠금장치가 있는 저장장소에 저장하시오.
- 현지/지역/국가/국제 규정에 따라서 내용물/용기 노출

· 기타 유해성

- PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과
- PBT(잔류성, 생물농축성, 독성 물질): 해당사항 없음.
- vPvB(고 잔류성, 고 생물농축성 물질): 해당사항 없음.

3 구성성분의 명칭 및 함유량

- 화학적 특성: 혼합물
- 설명: 무해한 첨가물 이 함유된 아래에 열거된 물질로 만들어진 혼합물.

(3 쪽에계속)

물질안전보건자료

GHS에 따라

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(2 쪽부터 계속)

· 위험 요소:		
56-81-5	glycerol	25-50%
64-17-5	Ethyl Alcohol, denatured ⚠ 인화성 액체 - 구분 2, H225	25-50%
64-19-7	Acetic Acid Glacial ⚠ 인화성 액체 - 구분 3, H226; ⚠ 피부 부식성/피부 자극성 - 구분 1, H314	2.5-10%
67-56-1	Methyl Alcohol ⚠ 인화성 액체 - 구분 2, H225; ⚠ 특정표적장기 독성 - 1회 노출 - 구분 1, H370; ⚠ 급성 독성 - 경구 - 구분 4, H302; ⚠ 급성 독성 - 경피 - 구분 4, H312; ⚠ 급성 독성 - 흡입 - 구분 4, H332; ⚠ 심한 눈 손상성/눈 자극성 - 구분 2, H319	≤ 2.5%

4 응급조치 요령

· **응급조치요령 내용**

· **일반 적 정보:**

중 독 증 상 은 몇 시 간 이 지 난 뒤 에 발 생 할 수 있 다. 따 라 서 사 고 가 발 생 한 후 에 적 어 도 48 시 간 동 안 은 의 료 진 의 관 찰 을 받 아 야 한 다.

· **흡입했을 때:**

신 선 한 공 기 를 쐬 고 나 서 반 드 시 의 료 진 의 도 움 을 구 한 다.
환 자 가 의 식 을 잃 었 을 경 우 에 는 안 전 한 자 세 에 서 환 자 를 운 반 한 다.

· **피부에 접촉했을 때:** 즉시 물과 비누로 씻고 잘 행군다.

· **눈에 들어갔을 때:** 흐르는 물에 눈을 몇 분 동안 씻어 내고 나서, 증 상 이 지 속 될 경 우 에 는 의 사 와 상 담 한 다

· **먹었을 때:** 즉 시 의 사 의 도 움 을 구 한 다.

· **기타 의 사 의 주 의 사 항:**

· **가장 중요한 급·만성 증상 및 영향** 추가적인 정보가 존재하지 않습니다.

· **즉각적인 의료처치 및 특별치료가 필요함을 시사하는 징후** 추가적인 정보가 존재하지 않습니다.

5 폭발·화재시 대처방법

· **소화제**

· **적절한 소화제:**

이 산 화 탄 소, 진 화 용 석 회 가 루 또는 물 방 사 를 사 용 하 고, 더 큰 화 재 는 물 을 분 사 하 거 나 알 코 올 이 함 유 된 거 품 으 로 끈 다.

· **본 화학물질이나 혼합물에서 발생하는 특별 유해성** 추가적인 정보가 존재하지 않습니다.

· **소방관에 대한 권고사항**

· **화재 진압 시 착용할 보호구 및 예방조치:** 호흡보호장비설치.

6 누출 사고 시 대처방법

· **개인적 예방조치, 보호장비 및 응급처치 절차** 안전장비 착용하고, 무 방 비 의 사 람 은 격 리 시 킨 다.

· **환경 관련 예방조치:**

하 천 이 나 하 수 도 로 유 입 되 었 을 경 우 해 당 관 청 에 보 고 한 다.

많 은 물 로 희 석 시 킨 다.

하 수 도 망 / 해 수 면 위 의 물 / 지 하 수 로 도 달 하 지 않 게 한 다.

· **밀폐 및 정화 방법과 소재:**

액 체 가 혼 합 된 물 질 (모 래, 규 조 토, 산 성 결 합 물, 일 반 결 합 물, 톱 밥) 에 흡 입 되 도 록 한 다.

항 목 13 에 따 라 오염 된 물 질 을 쓰레 기 로 처 분 한 다.

충 분 한 환 기 가 되 도 록 한 다.

· **타 섹션 참조**

안 전 관 리 에 대 한 정 보 는 제 7 장 을 참 고 하 시 오.

(4 쪽에 계속)

물질안전보건자료

GHS에 따라

기압점: 2017.04.14

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(3 쪽부터계속)

개인보호장비에 대한 정보는 제8 장 을 참고하시 오.
 쓰레기처리에 대한 정보는 제13 장 을 참고하시 오.

7 취급 및 저장방법

- 취급:
 - **안전 취급을 위한 예방조치**
 작업장에서는통풍이잘되고/습기제거가잘되게주의한다.
 연무질이형성되는것을피한다.
 - **화재 및 폭발 사고 예방대책에 관한 정보:**
 발 화 요소는 멀 리 둔 다-금 연.
 열로부터보호한다.
 정 전기 의 충 전 으로부터 보호한다.
 - **혼합위험성 등 안전 저장 조건**
 - **보관:**
 - **안전한 저장 방법:** 차 가 운 장 소 에 보 관 한 다.
 - **하나의 공동 보관 시설에 대한 보관 관련 정보:** 필 요 없 음
 - **보 관 조 건 에 관 한 추 가 적 인 정보:**
 용기를새지않게밀폐한채보관한다.
 밀폐된 용기속에서늘 하고건 조 하 게 보 관 한 다.
 열이나직사광선으로부터보호한다.
 - **구체적 최종 사용자** 추가적인 정보가 존재하지 않습니다.

8 노출방지 및 개인보호구

- **첨단시설 디자인에 대한 추가정보:** 더 이 상 의 자 료 는 없 음. 항 목 7 을 참 고 하 시 오.
- **통제 변수**

· **화학물질의 노출기준, 생물학적 노출기준 등:**

56-81-5 glycerol	
TLV (KR)	장기간의값: 10 mg/m ³
PEL (US)	장기간의값: 15* 5** mg/m ³ mist; *total dust **respirable fraction
TLV (US)	TLV withdrawn-insufficient data human occup. exp.
64-17-5 Ethyl Alcohol, denatured	
TLV (KR)	장기간의값: 1900 mg/m ³ , 1000 ppm
PEL (US)	장기간의값: 1900 mg/m ³ , 1000 ppm
REL (US)	장기간의값: 1900 mg/m ³ , 1000 ppm
TLV (US)	단기간의값: 1880 mg/m ³ , 1000 ppm
64-19-7 Acetic Acid Glacial	
TLV (KR)	단기간의값: 37 mg/m ³ , 15 ppm 장기간의값: 25 mg/m ³ , 10 ppm
IOELV (EU)	장기간의값: 25 mg/m ³ , 10 ppm
PEL (US)	장기간의값: 25 mg/m ³ , 10 ppm
REL (US)	단기간의값: 37 mg/m ³ , 15 ppm 장기간의값: 25 mg/m ³ , 10 ppm
TLV (US)	단기간의값: 37 mg/m ³ , 15 ppm 장기간의값: 25 mg/m ³ , 10 ppm

(5 쪽에계속)

물질안전보건자료

GHS에 따라

기압점: 2017.04.14

개정: 2017.04.14

제품명: EHRlich'S HEMATOXYLIN

(5 쪽부터계속)

· 색:	짙은갈색
· 냄새:	알코올종류의
· 후각역치	알맞지않다.
· pH:	알맞지않다.
· 상태변화	
· 녹는점/어는점:	맞지않는
· 초기 끓는점과 끓는점 범위:	78 °C
· 인화점:	17 °C
· 인화성(고체, 기체):	해당사항 없음.
· 점화온도:	400 °C
· 분해 온도:	알맞지않다.
· 자기점화:	이제품은자연발화성이없다.
· 폭발위험:	이제품은폭발위험성이없지만, 폭발가능성이있는증기화합물/공기화합물의형성가능성이있다.
· 인화 또는 폭발 범위의 상한/하한	
· 아래로:	0.9 Vol %
· 위로:	15.0 Vol %
· 증기압 의경우 20 °C:	59 hPa
· 밀도:	맞지않는다.
· 비중:	알맞지않다.
· 증기밀도:	알맞지않다.
· 증발 속도:	알맞지않다.
· 용해도:	
· 물:	완전히혼합할수있는
· n 옥탄올/물 분배계수:	알맞지않다.
· 점도:	
· 역학성:	알맞지않다.
· 동점성:	알맞지않다.
· 용매내용물	
· 유기용매:	66.0 %
· VOC (EU)	33.80 %
· 기타 정보	추가적인 정보가 존재하지 않습니다.

10 안정성 및 반응성

- 반응성 추가적인 정보가 존재하지 않습니다.
- 화학적 안정성
- 화학적 안정성 및 유해 반응의 가능성 / 피해야 할 조건: 규정에따라사용할경우해체는없다
- 유해반응 가능성 위험한 반응으로는알려지지않았다.
- 피해야 할 조건 추가적인 정보가 존재하지 않습니다.
- 혼합 금지 물질: 추가적인 정보가 존재하지 않습니다.
- 유해분해물질: 위험성있는분해물들은알려지지않았다.

KR

(7 쪽에계속)

물질안전보건자료

GHS에 따라

기압점: 2017.04.14

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(6 쪽부터계속)

11 독성에 관한 정보

· 독성학적 영향에 대한 정보

· 급성 독성:

· LD/LC50-수치에 따른 분류:

67-56-1 Methyl Alcohol

구강의	LD50	5628 mg/kg (rat)
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피부의	LD50	15800 mg/kg (rabbit)
-----	------	----------------------

· 일차적 자극 효과:

· 피부 부식성 또는 자극성: 피부와점막을 자극한다.

· 심한 눈 손상 또는 자극성: 자극

· 감각화:

호흡을통한감각화가가능성이있다.

피부접촉을통하여감각화가가능성이있다.

· 추가적인 독성에 관한 정보:

이제 품은 유럽공동체의 공동분류원칙의합법적인절차에 근거하여최근에 발효된원고에서아래 위험들의사전 준비에대하여제시하고있다.

건강에해로운

자극적인

· 다음 종류의 잠재적인 효과에 대한 정보

· CMR-효과 (암 유발, 돌연변이성 그리고 생식 독성)

생식세포 변이원성 - 구분 2

12 환경에 미치는 영향

· 독성

· 수생독성: 추가적인 정보가 존재하지 않습니다.

· 지속성 및 분해성 추가적인 정보가 존재하지 않습니다.

· 환경 시스템에서의 행동:

· 생물농축 잠재성 추가적인 정보가 존재하지 않습니다.

· 토양내 이동성 추가적인 정보가 존재하지 않습니다.

· 생태독성:

· 의견: 어류 에 매우 독성임

· 추가적인 생태학 정보:

· 일반 특징:

수질오염등급 1 (자체등급분류): 약하게수질오염이된

희석시키지않은채대량으로지하수나, 하천으로그리고하수도망에도달하지않게한다.

하천에서는역시물고기나플랑크톤게는독성이있다.

물속의유기체에아주독이되는것

· PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과

· PBT(잔류성, 생물농축성, 독성 물질): 해당사항 없음.

· vPvB(고 잔류성, 고 생물농축성 물질): 해당사항 없음.

· 기타 부작용 추가적인 정보가 존재하지 않습니다.

13 폐기시 주의사항

· 폐기물 처리 방법

· 권고: 생활쓰레기와함께처리되어서는안된다. 하수도망으로유입되어서는안된다.

(8 쪽에계속)

물질안전보건자료

GHS에 따라

기압점: 2017.04.14

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제품명: EHRlich'S HEMATOXYLIN

(7 쪽부터계속)

- 비위생적 포장:
- 권고: 당국의지침에입각한쓰레기처리.
- 추천 세정제: 경우에따라서세제가첨가된물

14 운송에 필요한 정보

· 유엔 번호 · ADR, IMDG, IATA	UN1987
· UN 적정 선적명 · ADR · IMDG · IATA	1987 ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL), ENVIRONMENTALLY HAZARDOUS ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL) ALCOHOLS, N.O.S. (ETHANOL, METHANOL)
· 교통 위험 클래스 · ADR 	3 발화성용액 3
· IMDG, IATA 	3 발화성용액 3
· 용기등급 · ADR, IMDG, IATA	II
· 환경적 유해물질: · 특수 마킹 (ADR):	심벌 (물고기와 나무)
· 이용자 특별 예방조치 · 위험 코드: · EMS-번호: · Stowage Category	경고: 발화성용액 33 F-E,S-D B
· MARPOL73/78(선박으로부터의 해양오염방지협약) 부속서2 및 IBC Code(국제선적화물코드)에 따른 벌크(bulk) 운송	해당사항 없음.
· 운 송/추가 정보: · ADR · 한정 수량 (LQ)	1L

(9 쪽에계속)

물질안전보건자료

GHS에 따라

기압점: 2017.04.14

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제품명: EHRlich'S HEMATOXYLIN

(8 쪽부터계속)

<ul style="list-style-type: none"> · Excepted quantities (EQ) · 운송 구분 · 터널 제한 코드 	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml 2 D/E
<ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) · Excepted quantities (EQ) 	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
<ul style="list-style-type: none"> · UN "모범 규제": 	UN 1987 ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL), 3, II, ENVIRONMENTALLY HAZARDOUS

15 법적 규제현황

- 산업안전보건법에 의한 규제:
- 제조 등 금지물질:

어떠한내용물도목록화되어있지않다

- 허가대상물질:

어떠한내용물도목록화되어있지않다

- 관리대상유해물질:

64-19-7 Acetic Acid Glacial
67-56-1 Methyl Alcohol
- 해당 순물질 또는 혼합물에 대한 안전, 보건 및 환경 규제/법률
- Korean Existing Chemical Inventory

56-81-5 glycerol	KE-29297
64-17-5 Ethyl Alcohol, denatured	KE-13217
64-19-7 Acetic Acid Glacial	KE-00013
67-56-1 Methyl Alcohol	KE-23193
517-28-2 haematoxylin	KE-10609
7681-55-2 Sodium iodate	KE-31509
- 화학물질관리법
- 사고대비물질

67-56-1 Methyl Alcohol

- 금지물질

어떠한내용물도목록화되어있지않다

- 제한물질

어떠한내용물도목록화되어있지않다

- 유독물질

67-56-1 Methyl Alcohol

- 허가물질

67-56-1 Methyl Alcohol

(10 쪽에계속)

물질안전보건자료

GHS에 따라

기압점: 2017.04.14

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(9 쪽부터계속)

- **GHS 라벨 요소**
본 제품은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.

· **그림문자**



· **신호어 위험**

· **상표상에명확히위험성이표시된성분:**

Methyl Alcohol

· **유해.위험 문구**

- 고인화성 액체 및 증기
- 금속을 부식시킬 수 있음
- 삼키거나 흡입하면 유해함.
- 피부에 자극을 일으킴
- 눈에 심한 자극을 일으킴
- 흡입시 알레르기성 반응, 천식 또는 호흡 곤란을 일으킬 수 있음
- 알레르기성 피부 반응을 일으킬 수 있음
- 유전적인 결함을 일으킬 것으로 의심됨
- 신체 중에 손상을 일으킬 수 있음
- 수생생물에 매우 유독함

· **예방조치 문구**

- 열·스파크·화염·고열로부터 멀리하시오 - 금연
- 피부(또는 머리카락)에 묻으면 오염된 모든 의복은 벗으시오. 피부를 물로 씻으시오/샤워하시오.
- 눈에 묻으면 몇 분간 물로 조심해서 씻으시오. 가능하면콘택트렌즈를 제거하시오. 계속 씻으시오.
- (라벨 참조) 처치를 하시오.
- 잠금장치가 있는 저장장소에 저장하시오.
- 현지/지역/국가/국제 규정에 따라서 내용물/용기 노출

· **화학물질 안전성 평가:** 화학물질 안전성 평가가 수행되지 않음

16 그 밖의 참고사항

이보고는우리지식에대한오늘날의상태에대하여평가하고있다, 하지만이보고서는생산특성에관한보증은 기술하지않았으며계약적인법률관계에기반을두고있지도않다

- **최초 작성일자:** 2017.04.14
- **개정 횟수 및 최종 개정일자:** 1 / 2017.04.14
- **약어와 두문자어:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 VOC: Volatile Organic Compounds (USA, EU)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative

物質安全資料表

根據 GB/T 16483-2008, GB/T 17519-2013

打印日期 2017.04.14

在 2017.04.14 審核

1 化學品及企業標識

- 產品識別者
- 化學品中文(英文)名稱, 化學品俗名或商品名: EHRlich'S HEMATOXYLIN
- 商品編號: 26040-05, 26753-01, 26040-06
- 相應純物質或者混合物的相關下位用途及禁止用途 無相關詳細資料。
- 原材料的應用/準備工作進行 實驗室化學物
- 安全技術說明書內供應商詳細信息
- 企業名稱:
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- 可獲取更多資料的部門: Product safety department
- 緊急聯繫電話號碼:
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 危險性概述

· 緊急情況概述:

深棕色, 溶液, 高度易燃液體和蒸氣。可能腐蝕金屬。 吞嚥或吸入有害。造成皮膚刺激。造成嚴重眼睛刺激。吸入可能導致過敏或哮喘病症狀或呼吸困難。可能造成皮膚過敏。懷疑造成遺傳性缺陷。可能會對器官造成傷害。對水生生物毒性非常大。

· GHS危險性類別



火焰

易燃液體 第2級

H225 高度易燃液體和蒸氣



健康危險

呼吸道過敏物質 第1級

H334 吸入可能導致過敏或哮喘病症狀或呼吸困難

生殖細胞致突變性物質 第2級

H341 懷疑造成遺傳性缺陷

特定標的器官系統毒性物質(單一暴露) 第2級 H371 可能會對器官造成傷害



腐蝕

金屬腐蝕物 第1級

H290 可能腐蝕金屬



環境

水環境之危害物質(急毒性) 第1級

H400 對水生生物毒性非常大



(在 2 頁繼續)

物質安全資料表

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在 2017.04.14 審核

化學品中文(英文)名稱, 化學品俗名或商品名 : EHRlich'S HEMATOXYLIN

(在 1 頁繼續)

急毒性物質(吞食) 第4級	H302 吞食有害
急毒性物質(吸入) 第4級	H332 吸入有害
腐蝕/刺激皮膚物質 第2級	H315 造成皮膚刺激
嚴重損傷/刺激眼睛物質 第2級	H319 造成嚴重眼睛刺激
皮膚過敏物質 第1級	H317 可能造成皮膚過敏

標籤因素

· **GHS標籤元素** 本產品根據化學物質分類及標記全球協調制度(GHS)進行了分類及標記。

圖示



GHS02 GHS05 GHS07 GHS08 GHS09

· **名稱** 危險

標籤上辨別危險的成份:

木精

危險字句

高度易燃液體和蒸氣
可能腐蝕金屬
吞咽或吸入有害。
造成皮膚刺激
造成嚴重眼睛刺激
吸入可能導致過敏或哮喘病症狀或呼吸困難
可能造成皮膚過敏
懷疑造成遺傳性缺陷
可能會對器官造成傷害
對水生生物毒性非常大

警戒字句

預防措施

遠離熱源/火花/明火/熱表面。 - 禁止抽菸。

事故響應

如皮膚(或頭髮)沾染: 立即移除或脫掉所有沾染的衣物。用水沖洗/淋洗皮膚。
如進入眼睛: 用水小心清洗數分鐘。如帶隱形眼鏡且可方便地取出, 取出隱形眼鏡。繼續清洗。
專項處置(參見本標示)。

安全貯存

加鎖存放。

廢棄處置

按照地方/區域/國家/國際法規處理內容物之廢棄/容器。

其他有害性

- PBT(殘留性、生物濃縮性、毒性物質) 及 vPvB(高殘留性、高生物濃縮性物質)評價結果
- PBT(殘留性、生物濃縮性、毒性物質) 不適用的
- vPvB(高殘留性、高生物濃縮性物質): 不適用的

3 成分/組成資訊

混合物

· **描述:** 由以下含有無害添加劑的成分組成的混合物

(在 3 頁繼續)

物質安全資料表

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在 2017.04.14 審核

化學品中文(英文)名稱, 化學品俗名或商品名: EHRlich's HEMATOXYLIN

(在 2 頁繼續)

· 危險的成分:

64-17-5	無水酒精 ⚠ 易燃液體 第2級, H225	25-50%
64-19-7	醋酸溶液 ⚠ 易燃液體 第3級, H226; ⚠ 腐蝕/刺激皮膚物質 第1A級, H314	2.5-10%
67-56-1	木精 ⚠ 易燃液體 第2級, H225; ⚠ 特定標的器官系統毒性物質(單一暴露) 第1級, H370; ⚠ 急毒性物質(吞食) 第4級, H302; ⚠ 急毒性物質(皮膚) 第4級, H312; ⚠ 急毒性物質(吸入) 第4級, H332; ⚠ 腐蝕/刺激皮膚物質 第3級, H316; ⚠ 嚴重損傷/刺激眼睛物質 第2B級, H320	≤ 2.5%

4 急救措施

· 應急措施要領

· **總說明:** 中毒的症狀可能會在幾個小時以後才出現;因此在發生事故之後起碼要有 48 小時的醫療觀察。

· 吸入:

供給新鮮空氣並且確保會叫醫生。

萬一病人不清醒時,請讓病人側躺以便移動。

· **皮膚接觸:** 馬上用水和肥皂進行徹底的沖洗。

· **眼睛接觸:** 張開眼睛在流水下沖洗數分鐘。如果症狀仍然持續,請諮詢醫生。

· **食入:** 馬上召喚醫生。

· 給醫生的資料:

· **最重要的急慢性症狀及其影響** 無相關詳細資料。

· **需要及時的醫療處理及特別處理的症狀** 無相關詳細資料。

5 消防措施

· 滅火方法

· **滅火的方法和滅火劑:** 二氧化碳 (CO₂)、滅火粉末或灑水。使用灑水或抗酒精泡沫滅火劑撲滅較大的火種。

· **特別危險性** 無相關詳細資料。

· 特殊滅火方法

· **消防人員特殊的防護裝備:** 口腔呼吸保護裝置。

6 洩漏應急處理

· **保護措施** 帶上保護儀器。讓未受到保護的人們遠離。

· 環境保護措施:

如果滲入了水源或污水系統,請通知有關當局。

用大量的水進行稀釋。

切勿讓其進入下水道/水面或地下水。

· 密封及淨化方法和材料:

吸收液體粘合原料(沙粒、矽藻土、酸性粘合劑、通用粘合劑、鋸屑)。

根據第 13 條條款棄置受汙染物。

確保有足夠的通風裝置。

· 參照其他部分

有關安全處理的資料請參閱第 7 節。

有關個人保護裝備的資料請參閱第 8 節。

有關棄置的資料請參閱第 13 節。

TW

(在 4 頁繼續)

物質安全資料表

根據 GB/T 16483-2008, GB/T 17519-2013

打印日期 2017.04.14

在 2017.04.14 審核

化學品中文(英文)名稱, 化學品俗名或商品名: EHRlich'S HEMATOXYLIN

(在 3 頁繼續)

7 操作處置與儲存

- **操作處置**
- **儲存**
確保工作間有良好的通風/排氣裝置。
防止氣溶膠的形成。
- **有關火災及防止爆炸的資料:**
遠離火源 - 切勿吸煙。
防熱。
防靜電。
- **混合危險性等安全儲存條件**
- **儲存:**
- **儲存庫和容器須要達到的要求:** 儲存在陰涼的位置。
- **有關使用一個普通的儲存設施來儲存的資料:** 不需要。
- **有關儲存條件的更多資料:**
將容器密封。
儲存密封的貯藏器內,並放在陰涼、幹爽的位置。
免受接觸熱力和直接受陽光照射。
- **具體的最終用戶** 無相關詳細資料。

8 接觸控制和個體防護

- **工程控制方法:** 沒有進一步數據,見第 7 項。
- **控制變數**

· 在工作場需要監控的限值成分

64-17-5 無水酒精	
PEL (TW)	PC-TWA: 1880 mg/m ³ , 1000 ppm
64-19-7 醋酸溶液	
PEL (TW)	PC-TWA: 25 mg/m ³ , 10 ppm
OEL (CN)	PC-STEL: 20 mg/m ³ PC-TWA: 10 mg/m ³
67-56-1 木精	
OEL (CN)	PC-STEL: 50 mg/m ³ PC-TWA: 25 mg/m ³

- **額外的資料:** 制作期間有效的清單將作為基礎來使用。
- **遺漏控制**
- **個人防護設備:**
- **一般保護和衛生措施:**
遠離食品、飲料和飼料。
立即除去所有的不潔的和被污染的衣服。
在休息之前和工作完畢後請清洗雙手。
避免和眼睛及皮膚接觸。
- **呼吸系統防護:**
如果曾短暫接觸或在低污染的情況下,請使用呼吸過濾裝置。如果曾深入或較長時間接觸,請使用獨立的呼吸保護裝置。

(在 5 頁繼續)

物質安全資料表

根據 GB/T 16483-2008, GB/T 17519-2013

打印日期 2017.04.14

在 2017.04.14 審核

化學品中文(英文)名稱, 化學品俗名或商品名: EHRlich'S HEMATOXYLIN

(在 4 頁繼續)

· 手防護:



保護手套

手套的物料必須是不滲透性的, 且能抵抗該產品/物質/添加劑。
基於缺乏測試, 對於產品/制劑/化學混合物, 並不會提供手套材料的建議
選擇手套材料時, 請注意材料的滲透時間, 滲濾率和降解參數

· 手套材料

選擇合適的手套不單取決於材料, 亦取決於質量特征, 以及來自哪一間生產廠家, 因為該產品是由很多材料
配制而成, 手套材料的抵抗力並不可預計, 所以, 必須在使用之前進行檢查

· 滲入手套材料的時間 請向勞保手套生產廠家獲取準確的破裂時間並觀察實際的破裂時間

· 眼睛防護:



密封的護目鏡

9 理化特性

· 有關基本物理及化學特性的資訊

· 一般說明

· 外觀:

· 形狀: 溶液
· 顏色: 深棕色
· 氣味: 類似酒精
· 嗅覺閾限 未決定.

· pH值: 未決定.

· 條件的更改

· 熔點: 未確定的
· 沸點/初沸點和沸程: 78 °C

· 閃點: 17 °C

· 可燃性(固體、氣體): 不適用的

· 點火溫度: 400 °C

· 分解溫度: 未決定.

· 自燃溫度: 該產品是不自燃的

· 爆炸的危險性: 該產品並非爆炸性的然而有可能形成可爆炸性的空氣/蒸汽混合物

· 爆炸極限:

· 較低: 0.9 Vol %
· 較高: 15.0 Vol %

· 蒸氣壓 在 20 °C: 59 hPa

· 密度: 未決定的

· 相對密度 未決定.

· 蒸氣密度 未決定.

· 蒸發速率 未決定.

(在 6 頁繼續)

物質安全資料表

根據 GB/T 16483-2008, GB/T 17519-2013

打印日期 2017.04.14

在 2017.04.14 審核

化學品中文(英文)名稱, 化學品俗名或商品名: EHRlich'S HEMATOXYLIN

(在 5 頁繼續)

- **溶解性**
水: 完全可拌和的
- **n-辛醇/水分配係數:** 未決定.
- **黏性:**
動態: 未決定.
運動學的: 未決定.
- **溶劑成份:**
有機溶劑: 66.0 %
- **其他資訊** 無相關詳細資料。

10 穩定性和反應性

- **反應性** 無相關詳細資料。
- **穩定性**
- **熱分解/要避免的情況:** 如果遵照規格使用則不會分解.
- **有害反應可能性** 未有已知的危險反應.
- **應避免的條件** 無相關詳細資料。
- **不相容的物質:** 無相關詳細資料。
- **危險的分解產物:** 未知有危險的分解產品.

11 毒理學資訊

- **對毒性學影響的資訊**
- **急性毒性:**

- **與分類相關的 LD/LC50 值:**

67-56-1 木精

口腔	LD50	5628 mg/kg (rat)
皮膚	LD50	15800 mg/kg (rabbit)

- **主要的刺激性影響:**
- **皮膚:** 刺激皮膚和粘膜.
- **在眼睛上面:** 刺激的影響.
- **致敏作用:**
通過吸入可能造成敏化作用.
通過皮膚接觸可能造成敏化作用.
- **更多毒物的資料:**
根據有關配制的一般歐盟分類指南的計算方法 (刊印在最新版本), 該產品顯示以下的危險:
有害的
刺激性的
- **對以下組別可能產生影響的資料:**
- **CMR作用 (致癌、導致基因突變、對生殖系統有害)**
生殖細胞致突變性物質 第2級

12 生態學資訊

- **生態毒性**
- **水生毒性:** 無相關詳細資料。
- **持久性和降解性** 無相關詳細資料。

(在 7 頁繼續)

物質安全資料表

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打印日期 2017.04.14

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(在 6 頁繼續)

- 環境系統習性:
- 潛在的生物累積性 無相關詳細資料。
- 土壤內移動性 無相關詳細資料。
- 生態毒性的影響:
- 備注: 對魚類有劇毒
- 額外的生態學資料:
- 總括注解:
水危害級別 1(德國規例) (通過名單進行自我評估): 對水是稍微危害的
不要讓未稀釋或大量的產品接觸地下水、水道或者汗水系統。
對水體中的魚和浮遊生物也有毒害。
對水中的有機物有劇毒。
- PBT(殘留性、生物濃縮性、毒性物質) 及 vPvB(高殘留性、高生物濃縮性物質) 評價結果
- PBT(殘留性、生物濃縮性、毒性物質) 不適用的
- vPvB(高殘留性、高生物濃縮性物質): 不適用的
- 其他副作用 無相關詳細資料。

13 廢棄處置

- 廢棄處置方法
- 建議: 不能將該產品和家居垃圾一起丟棄. 不要讓該產品接觸汗水系統。
- 受污染的容器和包裝:
- 建議: 必須根據官方的規章來丟棄。
- 建議的清洗劑: 如有必要請使用水及清潔劑進行清潔。

14 運輸資訊

- | | |
|---|--|
| · 聯合國危險貨物編號(UN號) | |
| · ADR, IMDG, IATA | UN1987 |
| · UN適當裝船名 | |
| · ADR | 1987 ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL), ENVIRONMENTALLY HAZARDOUS |
| · IMDG | ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL) |
| · IATA | ALCOHOLS, N.O.S. (ETHANOL, METHANOL) |
| · 運輸危險等級 | |
| · ADR | |
|  | |
|  | |
| · 級別 | 3 易燃液體 |
| · 標籤 | 3 |

(在 8 頁繼續)

物質安全資料表

根據 GB/T 16483-2008, GB/T 17519-2013

打印日期 2017.04.14

在 2017.04.14 審核

化學品中文(英文)名稱, 化學品俗名或商品名: EHRlich's HEMATOXYLIN

(在 7 頁繼續)

· IMDG, IATA



· Class 3 易燃液體
· Label 3

· 包裝組別

· ADR, IMDG, IATA II

· 危害環境:

· 具體標記 (ADR): 象徵符號 (魚和樹)

· 用戶特別預防措施

警告: 易燃液體

· 危險編碼:

33

· EMS 號碼:

F-E,S-D

· Stowage Category

B

· MARPOL73/78(針對船舶引起的海洋污染預防協約)
附件書2及根據IBC Code(國際裝船貨物編碼)的大量
運送

不適用的

· 運輸/額外的資料:

· ADR

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· IMDG

· Limited quantities (LQ)

1L

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· UN "標準規定":

UN 1987 ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL), 3, II, ENVIRONMENTALLY HAZARDOUS

15 法規資訊

· 對相應純物質或者混合物的安全、保健及環境法規/法律

· 中國現有化學物質名錄

列出所有成分

· GHS標識元素 本產品根據化學物質分類及標記全球協調制度(GHS)進行了分類及標記。

· 圖示



GHS02



GHS05



GHS07



GHS08



GHS09

· 名稱 危險

(在 9 頁繼續)

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化學品中文(英文)名稱, 化學品俗名或商品名: EHRlich's HEMATOXYLIN

(在 8 頁繼續)

· 標籤上辨別危險的成份:

木精

· 危險字句

高度易燃液體和蒸氣

可能腐蝕金屬

吞咽或吸入有害

造成皮膚刺激

造成嚴重眼睛刺激

吸入可能導致過敏或哮喘病症狀或呼吸困難

可能造成皮膚過敏

懷疑造成遺傳性缺陷

可能會對器官造成傷害

對水生生物毒性非常大

· 警戒字句

· 預防措施

遠離熱源/火花/明火/熱表面。 - 禁止抽菸。

· 事故響應

如皮膚(或頭髮)沾染: 立即移除或脫掉所有沾染的衣物。用水沖洗/淋洗皮膚。

如進入眼睛: 用水小心清洗數分鐘。如帶隱形眼鏡且可方便地取出, 取出隱形眼鏡。繼續清洗。

專項處置(參見本標示)。

· 安全貯存

加鎖存放。

· 廢棄處置

按照地方/區域/國家/國際法規處理內容物之廢棄/容器。

· 化學物質安全性評價: 尚未進行化學物質安全性評價

16 其他資訊

該資料是基於我們目前的知識。然而,這並不構成對任何特定產品特性的擔保並且不建立一個法律上有效的合同關係。

· 縮寫:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: 持久性生物累積性有毒物質

vPvB: very Persistent and very Bioaccumulative

易燃液體 第2級: Flammable liquids – Category 2

易燃液體 第3級: Flammable liquids – Category 3

金屬腐蝕物 第1級: Corrosive to metals – Category 1

急性毒性物質(吞食) 第4級: Acute toxicity – Category 4

腐蝕/刺激皮膚物質 第1A級: Skin corrosion/irritation – Category 1A

腐蝕/刺激皮膚物質 第2級: Skin corrosion/irritation – Category 2

腐蝕/刺激皮膚物質 第3級: Skin corrosion/irritation – Category 3

嚴重損傷/刺激眼睛物質 第2級: Serious eye damage/eye irritation – Category 2

嚴重損傷/刺激眼睛物質 第2B級: Serious eye damage/eye irritation – Category 2B

呼吸道過敏物質 第1級: Respiratory sensitisation – Category 1

皮膚過敏物質 第1級: Skin sensitisation – Category 1

生殖細胞致突變性物質 第2級: Germ cell mutagenicity – Category 2

特定標的器官系統毒性物質(單一暴露) 第1級: Specific target organ toxicity (single exposure) – Category 1

特定標的器官系統毒性物質(單一暴露) 第2級: Specific target organ toxicity (single exposure) – Category 2

水環境之危害物質(急性) 第1級: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Паспорт безопасности.
в соответствии с 1907/2006/ЕС, Статья 31

Дата печати: 14.04.2017

Дата редактирования: 14.04.2017

1 Наименование вещества / препарата и фирмы / предприятия

- Идентификатор продукта
- Торговое наименование: **EHRlich'S HEMATOXYLIN**
- Артикульный номер: 26040-05, 26753-01, 26040-06
- Соответствующие установленные применения вещества или смеси и не рекомендуемые области использования
Отсутствует какая-либо соответствующая информация.
- Применение вещества / препарата Лабораторные химикаты
- Подробная информация поставщика паспорта безопасности
- Производитель / Поставщик:
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- Отдел, предоставляющий информацию: Product safety department
- Номер телефона экстренной связи:
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 Возможные виды опасности

- Классификация вещества или смеси



пламя

Воспламеняющаяся жидкость 2 H225 Легко воспламеняющаяся жидкость и пар.



опасность для здоровья

Респираторная синсбилизация 1 H334 При вдыхании может вызывать аллергические или астматические симптомы или затруднение дыхания.

Мутагенность 1С H341 Предположительно вызывает генетические дефекты.

СТОМ - однократно 2 H371 Может нанести вред органам.



коррозия

Вещество, разъедающее металлы 1 H290 Может вызывать коррозию металлов.



окружающая среда

Острая токсичность для воды 1 H400 Весьма токсично для водных организмов.



Острая токсичность 4 H302 Вредно при проглатывании.

(Продолжение на странице 2)

Паспорт безопасности.
в соответствии с 1907/2006/ЕС, Статья 31

Дата печати: 14.04.2017

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Торговое наименование: EHRLICH'S HEMATOXYLIN

(Продолжение страницы 1)

<i>Острая токсичность 4</i>	<i>H332 Наносит вред при вдыхании.</i>
<i>Раздражение кожи 2</i>	<i>H315 Вызывает раздражение кожи.</i>
<i>Раздражение кожи 2</i>	<i>H319 Вызывает серьезное раздражение глаз.</i>
<i>Кожная сенсибилизация 1</i>	<i>H317 Может вызывать аллергическую кожную реакцию.</i>

· **Элементы маркировки**

· **Элементы маркировки в соответствии с СГС**

Данный продукт классифицируется и маркируется в соответствии с Согласованной на глобальном уровне системой классификации и маркировки химических веществ (GHS).

· **Пиктограммы, обозначающие опасности**



GHS02 GHS05 GHS07 GHS08 GHS09

· **Сигнальное слово** Опасно

· **Компоненты этикетки, указывающие на опасность:**

Methyl Alcohol

· **Предупреждения об опасности**

Легко воспламеняющаяся жидкость и пар.

Может вызывать коррозию металлов.

Опасно при проглатывании или при вдыхании.

Вызывает раздражение кожи.

Вызывает серьезное раздражение глаз.

При вдыхании может вызывать аллергические или астматические симптомы или затруднение дыхания.

Может вызывать аллергическую кожную реакцию.

Предположительно вызывает генетические дефекты.

Может нанести вред органам.

Весьма токсично для водных организмов.

· **Меры предосторожности**

Беречь от тепла/искр/открытого огня/горячих поверхностей. – Не курить.

ПРИ ПОПАДАНИИ НА КОЖУ (или волосы): Немедленно снять всю загрязненную одежду. Промыть кожу водой/под душем.

ПРИ ПОПАДАНИИ В ГЛАЗА: Осторожно промыть глаза водой в течение нескольких минут. Снять контактные линзы, если вы пользуетесь ими и если это легко сделать. Продолжить промывание глаз.

Применение специальных мер (см. на этом маркировочном знаке).

Хранить под замком.

Утилизировать содержимое / тару в соответствии с местными / региональными / национальными / международными предписаниями.

· **Другие опасные факторы**

· **Результаты оценки РВТ (устойчивое биоаккумулятивное токсическое вещество) и vPvB (очень устойчивое биоаккумулятивное вещество)**

· **РВТ:** Неприменимо.

· **vPvB:** Неприменимо.

3 Состав / Данные по составляющим компонентам

· **Химическая характеристика:** Смеси

· **Описание:** Смесь из веществ, перечисленных ниже, с неопасными добавками.

(Продолжение на странице 3)

Паспорт безопасности.
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Дата печати: 14.04.2017

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(Продолжение страницы 2)

· Содержащиеся опасные вещества:		
64-17-5	Ethyl Alcohol, denatured ⚠ Воспламеняющаяся жидкость 2, H225	25-50%
64-19-7	Acetic Acid Glacial ⚠ Воспламеняющаяся жидкость 3, H226; ⚠ Разъедание кожи 1A, H314	2,5-10%
67-56-1	Methyl Alcohol ⚠ Воспламеняющаяся жидкость 2, H225; ⚠ СТОМ - однократно 1, H370; ⚠ Острая токсичность 4, H302; ⚠ Острая токсичность 4, H312; ⚠ Острая токсичность 4, H332; ⚠ Разъедание кожи 3, H316; ⚠ Раздражение кожи 2B, H320	≤ 2,5%

· **Дополнительные указания:** Текст приведённых указаний на факторы риска см. в Главе 16.

4 Меры по оказанию первой помощи

· **Описание мер первой медицинской помощи**

· **Общие указания:**

Симптомы отравления могут проявиться даже спустя много часов, поэтому имеется необходимость в медицинском надзоре в течение как минимум 48 часов после аварии (несчастного случая).

· **После вдыхания:**

Обеспечить доступ свежего воздуха и для надёжности вызвать врача.

При потере сознания (обморочном состоянии) положить пациента на бок в стабильном положении для транспортировки.

· **После контакта с кожей:** Немедленно промыть с помощью воды и мыла, хорошо сполоснуть.

· **После контакта с глазами:**

Промойте открытый глаз под проточной водой в течение нескольких минут. При сохранении симптомов обратитесь к врачу.

· **После проглатывания:** Немедленно вызвать врача.

· **Указания для врача:**

· **Наиболее важные симптомы и эффекты, как немедленные, так и проявляющиеся впоследствии**

Отсутствует какая-либо соответствующая информация.

· **Указание на необходимость оперативной медицинской помощи и специального режима**

Отсутствует какая-либо соответствующая информация.

5 Меры по борьбе с пожаром

· **Средства пожаротушения**

· **Надлежащие средства тушения:**

СО₂, порошковое средство для тушения или водяная струя мелкого разбрызгивания. При борьбе с крупными пожарами следует применять водяную струю мелкого разбрызгивания или спиртоустойчивую пену.

· **Особые опасности, создаваемые веществом или смесью**

Отсутствует какая-либо соответствующая информация.

· **Рекомендации для пожарных**

· **Защитное оснащение:** Применение устройства защиты дыхательных путей.

6 Меры при непреднамеренном выделении (утечке)

· **Меры по обеспечению личной безопасности, защитное снаряжение и порядок действий в чрезвычайной ситуации**

Надеть защитное снаряжение. Держать на отдалении незащищённых людей.

(Продолжение на странице 4)

Паспорт безопасности.
в соответствии с 1907/2006/ЕС, Статья 31

Дата печати: 14.04.2017

Дата редактирования: 14.04.2017

Торговое наименование: EHRLICH'S HEMATOXYLIN

(Продолжение страницы 3)

- **Меры по защите окружающей среды:**
При попадании в водоёмы или в канализационную систему проинформировать об этом соответствующие службы.
Разбавить большим количеством воды.
Не допускать попадания в канализационную систему / поверхностные или грунтовые воды.
- **Методы и материалы для локализации и очистки:**
Собрать при помощи связывающего жидкость материала (песка, кизельгура, кислотно-вяжущего средства, универсальных вяжущих средств, опилок).
Утилизировать заражённый материал как отходы в соответствии с Пунктом 13.
Обеспечить достаточную вентиляцию.
- **Ссылки на другие разделы**
Информация по безопасному обращению - в Главе 7.
Информация по индивидуальному защитному снаряжению - в Главе 8.
Информация по утилизации - в Главе 13.

7 Обращение с веществом и его хранение

- **Обращение с веществом:**
- **Меры предосторожности по безопасному обращению**
Обеспечить хорошую вентиляцию / вытяжку на рабочем месте.
Не допускать образования аэрозолей.
- **Указания по защите от пожаров и взрывов:**
Держать подальше от источников воспламенения - не курить.
Защищать от жара.
Принять меры против электростатического заряжения.
- **Условия безопасного хранения, включая несовместимости**
- **Хранение:**
- **Требования, предъявляемые к складским помещениям и таре:** Хранить в прохладном месте.
- **Указания по совместимости с другими веществами при хранении:** Не требуется.
- **Дальнейшие данные по условиям хранения:**
Держать ёмкости плотно закрытыми.
Хранить в хорошо закрытой таре в прохладном и сухом месте.
Защищать от жары и от прямых солнечных лучей.
- **Характерное конечное применение (или применения)**
Отсутствует какая-либо соответствующая информация.

8 Ограничение воздействия вещества и контроль / индивидуальные средства защиты

- **Дополнительные указания по структуре технических устройств:**
Никаких дополнительных данных; см. Пункт 7.
- **Параметры контроля**

- **Составляющие компоненты с предельными значениями, требующие мониторинга на рабочих местах:**

64-17-5 Ethyl Alcohol, denatured

PDK	Краткосрочное значение: 2000 мг/м ³ Долгосрочное значение: 1000 мг/м ³ пары и/или газы
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64-19-7 Acetic Acid Glacial

PDK	Краткосрочное значение: 5 мг/м ³ пары и/или газы
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(Продолжение на странице 5)

Паспорт безопасности.
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Дата печати: 14.04.2017

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Торговое наименование: EHRLICH'S HEMATOXYLIN

(Продолжение страницы 4)

67-56-1 Methyl Alcohol

PDK	Краткосрочное значение: 15 мг/м ³
	Долгосрочное значение: 5 мг/м ³ пары и/или газы

- **Дополнительные указания:**

В качестве основы послужили списки, являвшиеся на момент составления актуальными.

- **Требования по охране труда и меры по обеспечению безопасности персонала**

- **Средства индивидуальной защиты:**

- **Общие меры по защите от воздействия и гигиене:**

Держать подальше от продуктов питания, напитков и корма для животных.

Немедленно снять всю загрязнённую и пропитанную вредными веществами одежду.

Мыть руки перед перерывами и по окончании работы.

Избегать контакта с глазами и с кожей.

- **Защита органов дыхания:**

При кратковременном контакте с веществом или при воздействии вещества низкой концентрации пользоваться фильтрующим устройством для защиты органов дыхания. При интенсивном или более продолжительном контакте следует воспользоваться автономным устройством защиты органов дыхания.

- **Защита рук:**



Защитные перчатки (рукавицы).

Материал перчаток / рукавиц должен быть устойчивым к воздействию продукта / вещества / препарата и не пропускать их.

Никаких рекомендаций в отношении материала перчаток / рукавиц, пригодных для применения в ходе работы с продуктом / препаратом / смесью химикатов дать нельзя, так как никаких испытаний в этом отношении не проводилось.

Выбор материала перчаток / рукавиц производится с учётом времени прорыва, степени проницаемости и эрозии.

- **Материал перчаток / рукавиц**

Выбор подходящих перчаток / рукавиц определяется не только материалом, но также и другими качественными особенностями, причём между различными производителями существует большая разница. Так как продукт представляет собой смесь различных веществ, то не представляется никакой возможности для расчёта устойчивости материала, из которого изготовлены перчатки / рукавицы, что вызывает необходимость перепроверки на предмет пригодности перед использованием.

- **Период проницаемости материала перчаток / рукавиц.**

Необходимо осведомиться у производителя защитных перчаток / рукавиц о точном времени прорыва и придерживаться его.

- **Защита глаз:**



Плотно прилегающие защитные очки

RU

(Продолжение на странице 6)

Паспорт безопасности.
в соответствии с 1907/2006/ЕС, Статья 31

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Торговое наименование: **EHRlich'S HEMATOXYLIN**

(Продолжение страницы 5)

9 Физические и химические свойства

· Информация по основным физическим и химическим свойствам	
· Общая информация	
· Внешний вид:	
Форма:	Раствор
Цвет:	Тёмно-коричневое
· Запах:	Спиртоподобно
· Порог запаха:	Не определено.
· Значение pH:	Не определено.
· Изменение состояния	
Точка плавления / интервал температур плавления:	Не определено.
Точка кипения / интервал температур кипения:	78 °С
· Температурная точка вспышки:	17 °С
· Воспламеняемость (твёрдое, газообразное вещество):	Неприменимо.
· Температура воспламенения:	400 °С
· Температура распада:	Не определено.
· Самовоспламеняемость:	Продукт не является самовоспламеняемым.
· Взрывоопасность:	Продукт не является взрывоопасным, однако возможно образование взрывоопасных смесей пара / воздуха.
· Границы взрываемости:	
Нижняя:	0,9 пол. %
Верхняя:	15,0 пол. %
· Давление пара при 20 °С:	59 гПа
· Плотность:	Не определено.
· Относительная плотность	Не определено.
· Плотность пара	Не определено.
· Скорость испарения	Не определено.
· Растворимость в / Смешиваемость с водой:	Полностью смешиваемо.
· Коэффициент распределения (n-октанол / вода):	Не определено.
· Вязкость:	
Динамическая:	Не определено.
Кинематическая:	Не определено.
· Содержание растворителя:	
Органические растворители:	66,0 %
VOC (ЕС)	33,80 %
· Другая информация	Отсутствует какая-либо соответствующая информация.

RU

(Продолжение на странице 7)

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в соответствии с 1907/2006/ЕС, Статья 31

Дата печати: 14.04.2017

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(Продолжение страницы 6)

10 Стабильность и реакционная способность

- **Реакционная способность** Отсутствует какая-либо соответствующая информация.
- **Химическая стабильность**
- **Термический распад / условия, которых следует избегать:**
При использовании в соответствии с предписаниями не происходит никакого распада.
- **Возможность опасных реакций** Неизвестно ни о каких опасных реакциях.
- **Условия, вызывающие опасные изменения** Отсутствует какая-либо соответствующая информация.
- **Несовместимые материалы:** Отсутствует какая-либо соответствующая информация.
- **Опасные продукты распада:** Неизвестно ни о каких опасных продуктах распада.

11 Данные по токсикологии

- **Информация по токсикологическому воздействию**
- **Острая токсичность:**

· **Значения LD/LC50 (летальной дозы/концентрации), необходимые для классифицирования:**

67-56-1 Methyl Alcohol

Орально (через рот)	LD50	5628 мг/кг (rat)
Дермально (через кожу)	LD50	15800 мг/кг (rabbit)

- **Первичное раздражающее воздействие:**
- **на кожу:** Раздражает кожу и слизистые оболочки.
- **на глаза:** Раздражающее воздействие.
- **Сенсибилизация:**
Сенсибилизация возможна посредством вдыхания.
Сенсибилизация возможна посредством кожного контакта.
- **Дополнительные токсикологические указания:**
На основании расчётного метода Всеобщей Классификационной Директивы ЕС для Препаратов в её последней (актуальной) редакции продукт представляет следующие виды опасности:
Вредно для здоровья
Раздражающе
- **Информация по следующим группам потенциальных воздействий:**
- **Канцерогенное, изменяющее наследственность и вызывающее бесплодие действие**
Мутагенность 1С

12 Экологическая информация

- **Токсичность**
- **Акватоксичность:** Отсутствует какая-либо соответствующая информация.
- **Стойкость и склонность к деградации** Отсутствует какая-либо соответствующая информация.
- **Поведение в экологических системах:**
- **Биоаккумулятивный потенциал** Отсутствует какая-либо соответствующая информация.
- **Подвижность в грунте** Отсутствует какая-либо соответствующая информация.
- **Экотоксические воздействия:**
- **Примечания:** Очень ядовито для рыб.
- **Дополнительные экологические указания:**
- **Общие указания:**
Класс вредности для воды 1 (Само-классификация): немного вредно для воды
Не допускать попадания продукта в грунтовые воды, водоёмы или в канализационную систему в неразбавленном виде или в больших количествах.
В водоёмах ядовито также для рыб и планктона.

(Продолжение на странице 8)

Паспорт безопасности.
в соответствии с 1907/2006/ЕС, Статья 31

Дата печати: 14.04.2017

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Торговое наименование: EHRLICH'S HEMATOXYLIN

(Продолжение страницы 7)

- Очень ядовито для водных организмов.
- **Результаты оценки РВТ (устойчивое биоаккумулятивное токсическое вещество) и vPvB (очень устойчивое биоаккумулятивное вещество)**
- **РВТ:** Неприменимо.
- **vPvB:** Неприменимо.
- **Другие вредные эффекты** Отсутствует какая-либо соответствующая информация.

13 Указания по утилизации

- **Методы обработки отходов**
- **Рекомендация:**
Утилизация совместно с бытовыми отходами недопустима. Не допускать попадания в канализацию.
- **Неочищенные упаковки:**
- **Рекомендация:**
Утилизация должна быть осуществлена в соответствии с предписаниями компетентных служб.
- **Рекомендуемые чистящие средства:** Вода - если необходимо, с добавлением чистящих средств.

14 Информация по транспорту

· Номер UN	UN1987
· ADR, IMDG, IATA	
· Собственное транспортное наименование ООН	1987 СПИРТЫ, Н.У.К. (ЭТАНОЛ (СПИРТ ЭТИЛОВЫЙ), МЕТАНОЛ), ОПАСНОЕ ДЛЯ ОКРУЖАЮЩЕЙ СРЕДЫ
· ADR	
· IMDG	ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL)
· IATA	ALCOHOLS, N.O.S. (ETHANOL, METHANOL)
· классов опасности транспорта	
· ADR	
· Класс	3 Легковоспламеняющиеся жидкости
· Этикетка для опасного содержимого	3
· IMDG, IATA	
· Class	3 Легковоспламеняющиеся жидкости
· Label	3
· Группа упаковки	II
· ADR, IMDG, IATA	

(Продолжение на странице 9)

Паспорт безопасности.
в соответствии с 1907/2006/ЕС, Статья 31

Дата печати: 14.04.2017

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Торговое наименование: **EHRlich'S HEMATOXYLIN**

(Продолжение страницы 8)

· Экологические риски:	
· Особые отметки (ADR):	Символ (рыба и дерево)
· Особые меры предосторожности для пользователей	Осторожно: Легковоспламеняющиеся жидкости
· Код опасности (по Кемлеру):	33
· Номер EMS:	F-E,S-D
· Stowage Category	B
· Транспортировка навалом в соответствии с Приложением II MARPOL73/78 (Международная конвенция по предотвращению загрязнения вод с судов) и IBC Code (Международный кодекс перевозок опасных химических грузов наливом)	Неприменимо.
· Транспорт / дополнительная информация:	
· ADR	
· Ограниченные объёмы (LQ)	1L
· Освобожденные количества (EQ)	Код: E2 Максимальное количество нетто на внутреннюю тару: 30 мл Максимальное количество нетто на наружную тару: 500 мл
· Транспортная категория	2
· Код ограничения проезда через туннели	D/E
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 мл Maximum net quantity per outer packaging: 500 мл
· UN "Model Regulation":	UN 1987 СПИРТЫ, Н.У.К. (ЭТАНОЛ (СПИРТ ЭТИЛОВЫЙ), МЕТАНОЛ), 3, II, ОПАСНОЕ ДЛЯ ОКРУЖАЮЩЕЙ СРЕДЫ

15 Предписания

- **Нормы безопасности, правила охраны труда и экологические нормативы или стандарты, действующие для вещества или смеси**
- **Элементы маркировки в соответствии с СГС**
Данный продукт классифицируется и маркируется в соответствии с Согласованной на глобальном уровне системой классификации и маркировки химических веществ (GHS).
- **Пиктограммы, обозначающие опасности**



GHS02 GHS05 GHS07 GHS08 GHS09

- **Сигнальное слово** Опасно
- **Компоненты этикетки, указывающие на опасность:**
Methyl Alcohol

(Продолжение на странице 10)

Паспорт безопасности.
в соответствии с 1907/2006/ЕС, Статья 31

Дата печати: 14.04.2017

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Торговое наименование: EHRLICH'S HEMATOXYLIN

(Продолжение страницы 9)

· Предупреждения об опасности*Легко воспламеняющаяся жидкость и пар.**Может вызывать коррозию металлов.**Опасно при проглатывании или при вдыхании.**Вызывает раздражение кожи.**Вызывает серьезное раздражение глаз.**При вдыхании может вызывать аллергические или астматические симптомы или затруднение дыхания.**Может вызывать аллергическую кожную реакцию.**Предположительно вызывает генетические дефекты.**Может нанести вред органам.**Весьма токсично для водных организмов.***· Меры предосторожности***Беречь от тепла/искр/открытого огня/горячих поверхностей. – Не курить.**ПРИ ПОПАДАНИИ НА КОЖУ (или волосы): Немедленно снять всю загрязненную одежду. Промыть кожу водой/под душем.**ПРИ ПОПАДАНИИ В ГЛАЗА: Осторожно промыть глаза водой в течение нескольких минут. Снять контактные линзы, если вы пользуетесь ими и если это легко сделать. Продолжить промывание глаз.**Применение специальных мер (см. на этом маркировочном знаке).**Хранить под замком.**Утилизировать содержимое / тару в соответствии с местными / региональными / национальными / международными предписаниями.***· Оценка химической безопасности:** Оценка химической безопасности не проведена.**16 Прочая информация:**

Данные опираются на актуальные знания, однако они не являются гарантией каких-либо конкретных свойств продукта и не устанавливают никаких действующих с юридической точки зрения договорных отношений.

· Соответствующие данные*H225 Легко воспламеняющаяся жидкость и пар.**H226 Воспламеняющаяся жидкость и пар.**H302 Вредно при проглатывании.**H312 Наносит вред при контакте с кожей.**H314 Вызывает серьезные ожоги кожи и повреждения глаз.**H316 Вызывает легкое раздражение кожи.**H320 Вызывает раздражение глаз.**H332 Наносит вред при вдыхании.**H370 Наносит вред органам.***· Аббревиатуры и акронимы:***ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)**IMDG: International Maritime Code for Dangerous Goods**IATA: International Air Transport Association**EINECS: European Inventory of Existing Commercial Chemical Substances**ELINCS: European List of Notified Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**VOC: Volatile Organic Compounds (USA, EU)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Воспламеняющаяся жидкость 2: Flammable liquids – Category 2**Воспламеняющаяся жидкость 3: Flammable liquids – Category 3**Вещество, разъедающее металлы 1: Corrosive to metals – Category 1**Острая токсичность 4: Acute toxicity – Category 4**Разъедание кожи 1A: Skin corrosion/irritation – Category 1A**Раздражение кожи 2: Skin corrosion/irritation – Category 2*

(Продолжение на странице 11)

Паспорт безопасности.
в соответствии с 1907/2006/ЕС, Статья 31

Дата печати: 14.04.2017

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Торговое наименование: EHRLICH'S HEMATOXYLIN

(Продолжение страницы 10)

*Разъедание кожи 3: Skin corrosion/irritation – Category 3**Раздражение кожи 2: Serious eye damage/eye irritation – Category 2**Раздражение кожи 2B: Serious eye damage/eye irritation – Category 2B**Респираторная сенсибилизация 1: Respiratory sensitisation – Category 1**Кожная сенсибилизация 1: Skin sensitisation – Category 1**Мутагенность 1С: Germ cell mutagenicity – Category 2**СТОМ - однократно 1: Specific target organ toxicity (single exposure) – Category 1**СТОМ - однократно 2: Specific target organ toxicity (single exposure) – Category 2**Острая токсичность для воды 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1*

RU

Ficha de datos de seguridad

según 1907/2006/CE, Artículo 31

fecha de impresión 14.04.2017

Revisión: 14.04.2017

SECCIÓN 1: Identificación de la sustancia o la mezcla y de la sociedad o la empresa

- **1.1 Identificador del producto**
- **Nombre comercial:** EHRlich'S HEMATOXYLIN
- **Número del artículo:** 26040-05, 26753-01, 26040-06
- **1.2 Usos pertinentes identificados de la sustancia o de la mezcla y usos desaconsejados**
No existen más datos relevantes disponibles.
- **Utilización del producto / de la elaboración** Sustancias químicas de laboratorio
- **1.3 Datos del proveedor de la ficha de datos de seguridad**
- **Fabricante/distribuidor:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- **Aname**
C/ Perez Galdos no. 2
28693 Quijorna
Madrid, Spain
Tel: +34.91.816.89.50
Fax: +34.91.816.85.94
email: ventas@aname.es
- **Área de información:** Product safety department
- **1.4 Teléfono de emergencia:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

SECCIÓN 2: Identificación de los peligros

- **2.1 Clasificación de la sustancia o de la mezcla**
- **Clasificación con arreglo al Reglamento (CE) n° 1272/2008**



GHS02 llama

Flam. Liq. 2 H225 Líquido y vapores muy inflamables.



GHS08 peligro para la salud

Resp. Sens. 1B H334 Puede provocar síntomas de alergia o asma o dificultades respiratorias en caso de inhalación.

Muta. 2 H341 Se sospecha que provoca defectos genéticos.

STOT SE 2 H371 Puede provocar daños en los órganos.



GHS05 corrosión

Met. Corr.1 H290 Puede ser corrosivo para los metales.

(se continua en página 2)

Ficha de datos de seguridad

según 1907/2006/CE, Artículo 31

fecha de impresión 14.04.2017

Revisión: 14.04.2017

Nombre comercial: **EHRlich'S HEMATOXYLIN**

(se continua en página 1)



GHS09 medio ambiente

Aquatic Acute 1 H400 Muy tóxico para los organismos acuáticos.



GHS07

Acute Tox. 4 H302 Nocivo en caso de ingestión.

Acute Tox. 4 H332 Nocivo en caso de inhalación.

Skin Irrit. 2 H315 Provoca irritación cutánea.

Skin Sens. 1B H317 Puede provocar una reacción alérgica en la piel.

· 2.2 Elementos de la etiqueta

· Etiquetado con arreglo al Reglamento (CE) n° 1272/2008

El producto se ha clasificado y etiquetado de conformidad con el reglamento CLP.

· Pictogramas de peligro



GHS02



GHS05



GHS07



GHS08



GHS09

· Palabra de advertencia Peligro

· Componentes peligrosos a indicar en el etiquetaje:

metanol

· Indicaciones de peligro

H225 Líquido y vapores muy inflamables.

H290 Puede ser corrosivo para los metales.

H302+H332 Nocivo en caso de ingestión o inhalación.

H315 Provoca irritación cutánea.

H334 Puede provocar síntomas de alergia o asma o dificultades respiratorias en caso de inhalación.

H317 Puede provocar una reacción alérgica en la piel.

H341 Se sospecha que provoca defectos genéticos.

H371 Puede provocar daños en los órganos.

H400 Muy tóxico para los organismos acuáticos.

· Consejos de prudencia

P210 Mantener alejado del calor, de superficies calientes, de chispas, de llamas abiertas y de cualquier otra fuente de ignición. No fumar.

P241 Utilizar un material eléctrico, de ventilación o de iluminación/antideflagrante.

P303+P361+P353 EN CASO DE CONTACTO CON LA PIEL (o el pelo): Quitar inmediatamente todas las prendas contaminadas. Aclararse la piel con agua/ducharse.

P321 Se necesita un tratamiento específico (ver en esta etiqueta).

P405 Guardar bajo llave.

P501 Eliminar el contenido o el recipiente conforme a la reglamentación local/regional/nacional/internacional.

· 2.3 Otros peligros

· Resultados de la valoración PBT y mPmB

· **PBT:** No aplicable.

· **mPmB:** No aplicable.

ES

(se continua en página 3)

Ficha de datos de seguridad

según 1907/2006/CE, Artículo 31

fecha de impresión 14.04.2017

Revisión: 14.04.2017

Nombre comercial: EHRlich'S HEMATOXYLIN

(se continua en página 2)

SECCIÓN 3: Composición/información sobre los componentes

· 3.2 Caracterización química: Mezclas

· **Descripción:** Mezcla formada por las sustancias especificadas a continuación con adiciones no peligrosas.

· Componentes peligrosos:

CAS: 56-81-5 EINECS: 200-289-5	glicerol sustancia a la que se aplica un límite comunitario de exposición en el lugar de trabajo	25-50%
CAS: 64-17-5 EINECS: 200-578-6	etanol Flam. Liq. 2, H225	25-50%
CAS: 64-19-7 EINECS: 200-580-7	ácido acético Flam. Liq. 3, H226; Skin Corr. 1A, H314	2,5-10%
CAS: 67-56-1 EINECS: 200-659-6	metanol Flam. Liq. 2, H225; STOT SE 1, H370; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	≤ 2,5%

· **Indicaciones adicionales:** El texto de los posibles riesgos aquí indicados se puede consultar en el capítulo 16.

SECCIÓN 4: Primeros auxilios

· 4.1 Descripción de los primeros auxilios

· Instrucciones generales:

Los síntomas de intoxicación pueden presentarse después de muchas horas, por lo que se requiere una supervisión médica durante un mínimo de 48 horas después del accidente.

· En caso de inhalación del producto:

Suministrar suficiente aire fresco y, para mayor seguridad, consultar el médico.

Las personas desmayadas deben tenderse y transportarse de lado con la suficiente estabilidad.

· En caso de contacto con la piel: Lavar inmediatamente con agua y jabón y enjuagar bien.

· En caso de con los ojos:

Limpiar los ojos abiertos durante varios minutos con agua corriente. En caso de trastornos persistentes consultar un médico.

· En caso de ingestión: Consultar inmediatamente un médico.

· 4.2 Principales síntomas y efectos, agudos y retardados No existen más datos relevantes disponibles.

· 4.3 Indicación de toda atención médica y de los tratamientos especiales que deban dispensarse inmediatamente No existen más datos relevantes disponibles.

SECCIÓN 5: Medidas de lucha contra incendios

· 5.1 Medios de extinción

· Sustancias extintoras apropiadas:

CO₂, polvo extintor o chorro de agua rociada. Combatir incendios mayores con chorro de agua rociada o espuma resistente al alcohol.

· 5.2 Peligros específicos derivados de la sustancia o la mezcla No existen más datos relevantes disponibles.

· 5.3 Recomendaciones para el personal de lucha contra incendios

· **Equipo especial de protección:** Colocarse la protección respiratoria.

SECCIÓN 6: Medidas en caso de vertido accidental

· 6.1 Precauciones personales, equipo de protección y procedimientos de emergencia

Llevar puesto equipo de protección. Mantener alejadas las personas sin protección.

(se continua en página 4)

Ficha de datos de seguridad

según 1907/2006/CE, Artículo 31

fecha de impresión 14.04.2017

Revisión: 14.04.2017

Nombre comercial: **EHRlich'S HEMATOXYLIN**

(se continua en página 3)

- **6.2 Precauciones relativas al medio ambiente:**
Al penetrar en las aguas o en el alcantarillado, avisar a las autoridades pertinentes.
Diluir con mucha agua.
Evitar que penetre en la canalización /aguas de superficie /agua subterráneas.
- **6.3 Métodos y material de contención y de limpieza:**
Quitar con material absorbente (arena, kieselgur, aglutinante de ácidos, aglutinante universal, aserrín).
Desechar el material contaminado como vertido según ítem 13.
Asegurar suficiente ventilación.
- **6.4 Referencia a otras secciones**
Ver capítulo 7 para mayor información sobre una manipulación segura.
Ver capítulo 8 para mayor información sobre el equipo personal de protección.
Para mayor información sobre cómo desechar el producto, ver capítulo 13.

SECCIÓN 7: Manipulación y almacenamiento

- **7.1 Precauciones para una manipulación segura**
Asegurar suficiente ventilación /aspiración en el puesto de trabajo.
Evitar la formación de aerosoles.
- **Prevención de incendios y explosiones:**
Mantener alejadas las fuentes de encendido. No fumar.
Proteger del calor.
Tomar medidas contra las cargas electrostáticas.
- **7.2 Condiciones de almacenamiento seguro, incluidas posibles incompatibilidades**
- **Almacenamiento:**
- **Exigencias con respecto al almacén y los recipientes:** Almacenar en un lugar fresco.
- **Normas en caso de un almacenamiento conjunto:** No es necesario.
- **Indicaciones adicionales sobre las condiciones de almacenamiento:**
Mantener el recipiente cerrado herméticamente.
Almacenarlo en envases bien cerrados en un lugar fresco y seco.
Proteger del calor y de la luz directa del sol.
- **7.3 Usos específicos finales** No existen más datos relevantes disponibles.

SECCIÓN 8: Controles de exposición/protección individual

- **Instrucciones adicionales para el acondicionamiento de instalaciones técnicas:**
Sin datos adicionales, ver punto 7.

· 8.1 Parámetros de control

- **Componentes con valores límite admisibles que deben controlarse en el puesto de trabajo:**

56-81-5 glicerol

LEP Valor de larga duración: 10 mg/m³

64-17-5 etanol

LEP Valor de corta duración: 1910 mg/m³, 1000 ppm
s

64-19-7 ácido acético

LEP Valor de corta duración: 37 mg/m³, 15 ppm
Valor de larga duración: 25 mg/m³, 10 ppm
VLI

(se continua en página 5)

Ficha de datos de seguridad

según 1907/2006/CE, Artículo 31

fecha de impresión 14.04.2017

Revisión: 14.04.2017

Nombre comercial: **EHRlich'S HEMATOXYLIN**

(se continua en página 4)

67-56-1 metanol

LEP Valor de larga duración: 266 mg/m³, 200 ppm
vía dérmica, VLB, VLI

· **Componentes con valores límite biológicos:****67-56-1 metanol**

VLB 15 mg/l
Muestra: orina
Momento de Muestero: Final de la jornada laboral
Indicador Biológico: Metanol

· **Indicaciones adicionales:** Como base se han utilizado las listas vigentes en el momento de la elaboración.· **8.2 Controles de la exposición**· **Equipo de protección individual:**· **Medidas generales de protección e higiene:**

Mantener alejado de alimentos, bebidas y alimentos para animales.

Quitarse de inmediato la ropa ensuciada o impregnada.

Lavarse las manos antes de las pausas y al final del trabajo.

Evitar el contacto con los ojos y la piel.

· **Protección respiratoria:**

Si la exposición va a ser breve o de poca intensidad, colocarse una máscara respiratoria. Para una exposición más intensa o de mayor duración, usar un aparato de respiración autónomo.

· **Protección de manos:**

Guantes de protección

El material del guante deberá ser impermeable y resistente al producto / sustancia / preparado.

Ante la ausencia de tests específicos, no se puede recomendar ningún material específico para guantes de protección contra el producto / preparado / mezcla de sustancias químicas.

Selección del material de los guantes en función de los tiempos de rotura, grado de permeabilidad y degradación.

· **Material de los guantes**

La elección del guante adecuado no depende únicamente del material, sino también de otras características de calidad, que pueden variar de un fabricante a otro. Teniendo en cuenta que el producto está fabricado a partir de diferentes materiales, su calidad no puede ser evaluada de antemano, de modo que los guantes deberán ser controlados antes de su utilización.

· **Tiempo de penetración del material de los guantes**

El tiempo de resistencia a la penetración exacto deberá ser pedido al fabricante de los guantes. Este tiempo debe ser respetado.

· **Protección de ojos:**

Gafas de protección herméticas

SECCIÓN 9: Propiedades físicas y químicas

· **9.1 Información sobre propiedades físicas y químicas básicas**· **Datos generales**· **Aspecto:****Forma:**

Solución

(se continua en página 6)

Ficha de datos de seguridad

según 1907/2006/CE, Artículo 31

fecha de impresión 14.04.2017

Revisión: 14.04.2017

Nombre comercial: **EHRlich'S HEMATOXYLIN**

(se continua en página 5)

· Color:	Marrón oscuro
· Olor:	Similar al del alcohol
· Umbral olfativo:	No determinado.
· valor pH:	No determinado.
· Cambio de estado	
Punto de fusión/punto de congelación:	Indeterminado.
Punto inicial de ebullición e intervalo de ebullición:	78 °C
· Punto de inflamación:	17 °C
· Inflamabilidad (sólido, gas):	No aplicable.
· Temperatura de ignición:	400 °C
· Temperatura de descomposición:	No determinado.
· Temperatura de auto-inflamación:	El producto no es autoinflamable.
· Propiedades explosivas:	El producto no es explosivo; sin embargo, pueden formarse mezclas explosivas de vapor / aire.
· Límites de explosión:	
Inferior:	0,9 Vol %
Superior:	15,0 Vol %
· Presión de vapor a 20 °C:	59 hPa
· Densidad:	Indeterminado.
· Densidad relativa	No determinado.
· Densidad de vapor	No determinado.
· Tasa de evaporación:	No determinado.
· Solubilidad en / miscibilidad con agua:	Completamente mezclable.
· Coefficiente de reparto: n-octanol/agua:	No determinado.
· Viscosidad:	
Dinámica:	No determinado.
Cinemática:	No determinado.
· Concentración del disolvente:	
Disolventes orgánicos:	66,0 %
VOC (CE)	33,80 %
· 9.2 Otros datos	No existen más datos relevantes disponibles.

SECCIÓN 10: Estabilidad y reactividad

- **10.1 Reactividad** No existen más datos relevantes disponibles.
- **10.2 Estabilidad química**
- **Descomposición térmica / condiciones que deben evitarse:** No se descompone al emplearse adecuadamente.
- **10.3 Posibilidad de reacciones peligrosas** No se conocen reacciones peligrosas.
- **10.4 Condiciones que deben evitarse** No existen más datos relevantes disponibles.
- **10.5 Materiales incompatibles:** No existen más datos relevantes disponibles.
- **10.6 Productos de descomposición peligrosos:** No se conocen productos de descomposición peligrosos.

ES

(se continua en página 7)

Ficha de datos de seguridad

según 1907/2006/CE, Artículo 31

fecha de impresión 14.04.2017

Revisión: 14.04.2017

Nombre comercial: EHRlich'S HEMATOXYLIN

(se continua en página 6)

SECCIÓN 11: Información toxicológica

· 11.1 Información sobre los efectos toxicológicos

· Toxicidad aguda

Nocivo en caso de ingestión o inhalación.

· Valores LD/LC50 (dosis letal /dosis letal = 50%) relevantes para la clasificación:

67-56-1 metanol

Oral	LD50	5628 mg/kg (rat)
Dermal	LD50	15800 mg/kg (rabbit)

· Efecto estimulante primario:

· Corrosión o irritación cutáneas

Provoca irritación cutánea.

· Lesiones o irritación ocular graves

A la vista de los datos disponibles, no se cumplen los criterios de clasificación.

· Sensibilización respiratoria o cutánea

Puede provocar síntomas de alergia o asma o dificultades respiratorias en caso de inhalación.

Puede provocar una reacción alérgica en la piel.

· Efectos CMR (carcinogenicidad, mutagenicidad y toxicidad para la reproducción)

· Mutagenicidad en células germinales

Se sospecha que provoca defectos genéticos.

· Carcinogenicidad A la vista de los datos disponibles, no se cumplen los criterios de clasificación.

· Toxicidad para la reproducción A la vista de los datos disponibles, no se cumplen los criterios de clasificación.

· Toxicidad específica en determinados órganos (STOT) – exposición única

Puede provocar daños en los órganos.

· Toxicidad específica en determinados órganos (STOT) – exposición repetida

A la vista de los datos disponibles, no se cumplen los criterios de clasificación.

· Peligro de aspiración A la vista de los datos disponibles, no se cumplen los criterios de clasificación.

SECCIÓN 12: Información ecológica

· 12.1 Toxicidad

· Toxicidad acuática: No existen más datos relevantes disponibles.

· 12.2 Persistencia y degradabilidad No existen más datos relevantes disponibles.

· 12.3 Potencial de bioacumulación No existen más datos relevantes disponibles.

· 12.4 Movilidad en el suelo No existen más datos relevantes disponibles.

· Efectos ecotóxicos:

· Observación: Muy tóxico para peces.

· Indicaciones medioambientales adicionales:

· Indicaciones generales:

Nivel de riesgo para el agua 1 (autoclasiicación): escasamente peligroso para el agua

En estado no diluido o no neutralizado, no dejar que se infiltre en aguas subterráneas, aguas superficiales o en alcantarillados.

Vertido en aguas superficiales, también es tóxico para los peces y el plancton.

muy tóxico para organismos acuáticos

· 12.5 Resultados de la valoración PBT y mPmB

· PBT: No aplicable.

· mPmB: No aplicable.

· 12.6 Otros efectos adversos No existen más datos relevantes disponibles.

ES

(se continua en página 8)

Ficha de datos de seguridad
según 1907/2006/CE, Artículo 31

fecha de impresión 14.04.2017

Revisión: 14.04.2017

Nombre comercial: EHRlich'S HEMATOXYLIN

(se continua en página 7)

SECCIÓN 13: Consideraciones relativas a la eliminación

- **13.1 Métodos para el tratamiento de residuos**
- **Recomendación:** No debe desecharse con la basura doméstica. No debe llegar al alcantarillado.
- **Embalajes sin limpiar:**
- **Recomendación:** Eliminar conforme a las disposiciones oficiales.
- **Producto de limpieza recomendado:** Agua, eventualmente añadiendo productos de limpieza.

SECCIÓN 14: Información relativa al transporte

· 14.1 Número ONU · ADR, IMDG, IATA	UN1987
· 14.2 Designación oficial de transporte de las Naciones Unidas · ADR	1987 ALCOHOLES, N.E.P. (ETANOL (ALCOHOL ETÍLICO), METANOL), PELIGROSO PARA EL MEDIO AMBIENTE
· IMDG	ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL)
· IATA	ALCOHOLS, N.O.S. (ETHANOL, METHANOL)
· 14.3 Clase(s) de peligro para el transporte · ADR	
	
· Clase · Etiqueta	3 Líquidos inflamables 3
· IMDG, IATA	
	
· Class · Label	3 Líquidos inflamables 3
· 14.4 Grupo de embalaje · ADR, IMDG, IATA	II
· 14.5 Peligros para el medio ambiente: · Marcado especial (ADR):	Símbolo (pez y árbol)
· 14.6 Precauciones particulares para los usuarios · Número Kemler: · Número EMS: · Stowage Category	Atención: Líquidos inflamables 33 F-E,S-D B
· 14.7 Transporte a granel con arreglo al anexo II del Convenio MARPOL y el Código IBC	No aplicable.

(se continua en página 9)

Ficha de datos de seguridad

según 1907/2006/CE, Artículo 31

fecha de impresión 14.04.2017

Revisión: 14.04.2017

Nombre comercial: **EHRlich'S HEMATOXYLIN**

(se continua en página 8)

· **Transporte/datos adicionales:**

· **ADR**

· **Cantidades limitadas (LQ)**

1L

· **Cantidades exceptuadas (EQ)**

Código: E2

Cantidad neta máxima por envase interior: 30 ml

Cantidad neta máxima por embalaje exterior: 500 ml

· **Categoría de transporte**

2

· **Código de restricción del túnel**

D/E

· **IMDG**

· **Limited quantities (LQ)**

1L

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **"Reglamentación Modelo" de la UNECE:**

UN 1987 ALCOHOLES, N.E.P. (ETANOL (ALCOHOL ETÍLICO), METANOL), 3, II, PELIGROSO PARA EL MEDIO AMBIENTE

SECCIÓN 15: Información reglamentaria

· **15.1 Reglamentación y legislación en materia de seguridad, salud y medio ambiente específicas para la sustancia o la mezcla**

· **Directiva 2012/18/UE**

· **Sustancias peligrosas nominadas - ANEXO I metanol**

· **Categoría Seveso**

E1 Peligroso para el medio ambiente acuático

P5c LÍQUIDOS INFLAMABLES

· **Cantidad umbral (toneladas) a efectos de aplicación de los requisitos de nivel inferior 100 t**

· **Cantidad umbral (toneladas) a efectos de aplicación de los requisitos de nivel superior 200 t**

· **REGLAMENTO (CE) n° 1907/2006 ANEXO XVII Restricciones: 3**

· **15.2 Evaluación de la seguridad química: Una evaluación de la seguridad química no se ha llevado a cabo.**

SECCIÓN 16: Otra información

Los datos se fundan en el estado actual de nuestros conocimientos, pero no constituyen garantía alguna de cualidades del producto y no generan ninguna relación jurídica contractual.

· **Frases relevantes**

H225 Líquido y vapores muy inflamables.

H226 Líquidos y vapores inflamables.

H302 Nocivo en caso de ingestión.

H312 Nocivo en contacto con la piel.

H314 Provoca quemaduras graves en la piel y lesiones oculares graves.

H315 Provoca irritación cutánea.

H332 Nocivo en caso de inhalación.

H370 Provoca daños en los órganos.

· **Abreviaturas y acrónimos:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

(se continua en página 10)

Ficha de datos de seguridad
según 1907/2006/CE, Artículo 31

fecha de impresión 14.04.2017

Revisión: 14.04.2017

Nombre comercial: EHRLICH'S HEMATOXYLIN

(se continua en página 9)

*EINECS: European Inventory of Existing Commercial Chemical Substances**ELINCS: European List of Notified Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**VOC: Volatile Organic Compounds (USA, EU)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Flam. Liq. 2: Líquidos inflamables – Categoría 2**Flam. Liq. 3: Líquidos inflamables – Categoría 3**Met. Corr.1: Corrosivos para los metales – Categoría 1**Acute Tox. 4: Toxicidad aguda – Categoría 4**Skin Corr. 1A: Corrosión o irritación cutáneas – Categoría 1A**Skin Irrit. 2: Corrosión o irritación cutáneas – Categoría 2**Resp. Sens. 1B: Sensibilización respiratoria – Categoría 1B**Skin Sens. 1B: Sensibilización cutánea – Categoría 1B**Muta. 2: Mutagenicidad en células germinales – Categoría 2**STOT SE 1: Toxicidad específica en determinados órganos (exposición única) – Categoría 1**STOT SE 2: Toxicidad específica en determinados órganos (exposición única) – Categoría 2**Aquatic Acute 1: Peligroso para el medio ambiente acuático - peligro acuático agudo – Categoría 1*

ES

Säkerhetsdatablad

Enligt 1907/2006/EG, Artikel 31

Datum för utskrift: 14.04.2017

Omarbetad: 14.04.2017

AVSNITT 1: Namnet på ämnet/blandningen och bolaget/företaget

- **1.1 Produktbeteckning**
- **Handelsnamn:** EHRlich'S HEMATOXYLIN
- **Artikelnummer:** 26040-05, 26753-01, 26040-06
- **1.2 Relevanta identifierade användningar av ämnet eller blandningen och användningar som det avråds från**
Ingen ytterligare relevant information finns till förfogande.
- **Ämnets användning / tillredningen** Laboratoriekemikalier
- **1.3 Närmare upplysningar om den som tillhandahåller säkerhetsdatablad**
- **Tillverkare/leverantör:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- **Område där upplysningar kan inhämtas:** Product safety department
- **1.4 Telefonnummer för nödsituationer:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

AVSNITT 2: Farliga egenskaper

- **2.1 Klassificering av ämnet eller blandningen**
- **Klassificering enligt förordning (EG) nr 1272/2008**



GHS02 flamma

Flam. Liq. 2 H225 Mycket brandfarlig vätska och ånga.



GHS08 hälsofara

Resp. Sens. 1B H334 Kan orsaka allergi- eller astmasymtom eller andningssvårigheter vid inandning.

Muta. 2 H341 Misstänks kunna orsaka genetiska defekter.

STOT SE 2 H371 Kan orsaka organskador.



GHS05 frätande

Met. Corr.1 H290 Kan vara korrosivt för metaller.



GHS09 miljöfarligt

Aquatic Acute 1 H400 Mycket giftigt för vattenlevande organismer.



GHS07

Acute Tox. 4 H302 Skadligt vid förtäring.

Acute Tox. 4 H332 Skadligt vid inandning.

(Fortsättning på sida 2)

Säkerhetsdatablad

Enligt 1907/2006/EG, Artikel 31

Datum för utskrift: 14.04.2017

Omarbetad: 14.04.2017

Handelsnamn: EHRlich'S HEMATOXYLIN

(Fortsättning från sida 1)

Skin Irrit. 2 H315 Irriterar huden.
 Skin Sens. 1B H317 Kan orsaka allergisk hudreaktion.

· 2.2 Märkningsuppgifter

- **Märkning enligt förordning (EG) nr 1272/2008** Produkten är klassificerad och märkt enligt CLP-förordningen.
- **Faropiktogram**



GHS02 GHS05 GHS07 GHS08 GHS09

· Signalord Fara

- **Riskbestämmande komponenter för etikettering:**
metanol

· Faroangivelser

- H225 Mycket brandfarlig vätska och ånga.
 H290 Kan vara korrosivt för metaller.
 H302+H332 Skadligt vid förtäring eller inandning.
 H315 Irriterar huden.
 H334 Kan orsaka allergi- eller astmasymtom eller andningssvårigheter vid inandning.
 H317 Kan orsaka allergisk hudreaktion.
 H341 Misstänks kunna orsaka genetiska defekter.
 H371 Kan orsaka organskador.
 H400 Mycket giftigt för vattenlevande organismer.

· Skyddsangivelser

- P210 Får inte utsättas för värme, heta ytor, gnistor, öppna lågor och andra antändningskällor.
 Rökning förbjuden.
 P241 Använd explosionssäker elektrisk/ventilations-/belysnings-/utrustning.
 P303+P361+P353 VID HUDKONTAKT (även håret): Ta omedelbart av alla nedstänkta kläder. Skölj huden med vatten/duscha.
 P321 Särskild behandling (se på etiketten).
 P405 Förvaras inlåst.
 P501 Innehållet / behållaren avfallshanteras enligt lokala / regionala / nationella / internationella föreskrifter.

· 2.3 Andra faror

· Resultat av PBT- och vPvB-bedömningen

- **PBT:** Ej användbar.
- **vPvB:** Ej användbar.

AVSNITT 3: Sammansättning/information om beståndsdelar

· 3.2 Kemisk karakterisering: Blandningar

- **Beskrivning:** Blandning bestående av nedan upplistade ämnen med ofarliga tillsatser.

· Farliga ingredienser:

CAS: 64-17-5 EINECS: 200-578-6	etanol Flam. Liq. 2, H225	25-50%
CAS: 64-19-7 EINECS: 200-580-7	ättiksyra Flam. Liq. 3, H226; Skin Corr. 1A, H314	2,5-10%
CAS: 67-56-1 EINECS: 200-659-6	metanol Flam. Liq. 2, H225; STOT SE 1, H370; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	≤ 2,5%

(Fortsättning på sida 3)

Säkerhetsdatablad

Enligt 1907/2006/EG, Artikel 31

Datum för utskrift: 14.04.2017

Omarbetad: 14.04.2017

Handelsnamn: EHRlich'S HEMATOXYLIN

(Fortsättning från sida 2)

· **Ytterligare hänvisningar:** De angivna farohänvisningarnas ordalydelse framgår av kapitel 16.

AVSNITT 4: Åtgärder vid första hjälpen

- **4.1 Beskrivning av åtgärder vid första hjälpen**
- **Allmänna hänvisningar:**
Förgiftningssymptom kan uppträda först efter många timmar. Av denna anledning krävs läkarövervakning i minst 48 timmar efter ett olycksfall.
- **Vid inandning:**
Riklig tillförsel av friskluft, kontakta läkare för säkerhets skull.
Vid medvetslöshet lägg och transportera patient stabilt i framstupa sidoläge.
- **Vid kontakt med huden:** Tvätta omedelbart med vatten och tvål och spola därefter noggrant.
- **Vid kontakt med ögonen:**
Spola ögonen öppna i flera minuter under rinnande vatten. Om besvär kvarstår, kontakta läkare.
- **Vid förtäring:** Kontakta läkare omedelbart.
- **4.2 De viktigaste symptomen och effekterna, både akuta och fördröjda**
Ingen ytterligare relevant information finns till förfogande.
- **4.3 Angivande av omedelbar medicinsk behandling och särskild behandling som eventuellt krävs**
Ingen ytterligare relevant information finns till förfogande.

AVSNITT 5: Brandbekämpningsåtgärder

- **5.1 Släckmedel**
- **Lämpliga släckningsmedel:**
CO₂, släckningspulver eller spridd vattenstråle. Större bränder skall bekämpas med spridd vattenstråle eller alkoholbeständigt skum.
- **5.2 Särskilda faror som ämnet eller blandningen kan medföra**
Ingen ytterligare relevant information finns till förfogande.
- **5.3 Råd till brandbekämpningspersonal**
- **Speciell skyddsutrustning:** Använd andningsskyddsutrustning.

AVSNITT 6: Åtgärder vid oavsiktliga utsläpp

- **6.1 Personliga skyddsåtgärder, skyddsutrustning och åtgärder vid nödsituationer**
Använd skyddsutrustning. Håll oskyddade personer på avstånd.
- **6.2 Miljöskyddsåtgärder:**
När produkten kommit in i vattendrag eller avloppsnät, skall vederbörande myndigheter underrättas.
Blanda ut med mycket vatten.
Förhindra produkten att tränga ner i avloppsnät/ytvatten/grundvatten.
- **6.3 Metoder och material för inneslutning och sanering:**
Sug upp med vätskebindande material (sand, kiselgur, syrabindemedel, universalbindemedel, sågspån).
Omhändertat förorenat material som avfall enligt punkt 13.
Se till att ventilationen är tillräcklig.
- **6.4 Hänvisning till andra avsnitt**
Information beträffande säker hantering se kapitel 7.
Information beträffande personlig skyddsutrustning se kapitel 8.
Information beträffande avfallshantering se kapitel 13.

SE

(Fortsättning på sida 4)

Säkerhetsdatablad

Enligt 1907/2006/EG, Artikel 31

Datum för utskrift: 14.04.2017

Omarbetad: 14.04.2017

Handelsnamn: EHRlich'S HEMATOXYLIN

(Fortsättning från sida 3)

AVSNITT 7: Hantering och lagring

- **7.1 Försiktighetsmått för säker hantering**
Sörj för god ventilation/utsug på arbetsplatsen.
Undvik bildning av aerosol.
- **Hänvisningar beträffande brand- och explosionsskydd:**
Håll åtskild från antändningskällor - rök ej.
Skyddas mot värme.
Vidta åtgärder mot elektrostatisk uppladdning.
- **7.2 Förhållanden för säker lagring, inklusive eventuell oförenlighet**
- **Lagring:**
- **Krav på lagerutrymmen och behållare:** Förvaras svalt.
- **Hänvisningar beträffande sammanlagring:** Erfordras ej.
- **Ytterligare uppgifter till lagringsvillkoren:**
Förvara behållaren tätt tillsluten.
Förvaras svalt och torrt i väl tillslutet emballage.
Skyddas mot värme och direkt solljus.
- **7.3 Specifik slutanvändning** Ingen ytterligare relevant information finns till förfogande.

AVSNITT 8: Begränsning av exponeringen/personligt skydd

- **Ytterligare hänvisningar beträffande utformning av tekniska anläggningar:** Inga övriga uppgifter, se punkt 7.

· 8.1 Kontrollparametrar

- **Ämnen med yrkeshygieniska gränsvärden som bör övervakas:**

64-17-5 etanol

OEL	Korttidsvärde: 1900 mg/m ³ , 1000 ppm
	Nivågränsvärde: 1000 mg/m ³ , 500 ppm
	V

64-19-7 ättiksyra

OEL	Korttidsvärde: 25 mg/m ³ , 10 ppm
	Nivågränsvärde: 13 mg/m ³ , 5 ppm
	V

67-56-1 metanol

OEL	Korttidsvärde: 350 mg/m ³ , 250 ppm
	Nivågränsvärde: 250 mg/m ³ , 200 ppm
	H, V

- **Ytterligare hänvisningar:** De vid framställningen gällande listorna har använts som utgångspunkt.

· 8.2 Begränsning av exponeringen

· Personlig skyddsutrustning:

· Allmänna skydds- och hygienåtgärder:

- Undvik kontakt med livsmedel, drycker och fodermedel.
- Nedsmutsade, indränkta klädesplagg skall omedelbart tas av.
- Tvätta händerna före raster och efter arbetet.
- Undvik kontakt med ögonen och huden.

· Andningsskydd:

- Vid kortvarig eller ringa belastning - använd andningsfilterutrustning; vid intensiv resp. längre exponering - använd andningsskyddsutrustning som är oberoende av omgivningsluften.

(Fortsättning på sida 5)

Säkerhetsdatablad

Enligt 1907/2006/EG, Artikel 31

Datum för utskrift: 14.04.2017

Omarbetad: 14.04.2017

Handelsnamn: EHRlich'S HEMATOXYLIN

(Fortsättning från sida 4)

· Handskydd:

Skyddshandskar

Handskmaterialet måste vara tätt och beständigt mot produkt/ämne/tillredning.

Handskmaterialrekommendationer kan inte ges för produkt/tillredning/kemikalielösning, då inga tester genomförts.

Val av handskmaterial beaktande penetrationstider, permeationskvoter och degradation.

· Handskmaterial

Val av lämplig handske är inte enbart beroende av material utan även av andra kvalitetskriterier och varierar från en tillverkare till nästa. Då produkten bereds av flera material, kan handskmaterialets beständighet inte förutses och måste därför kontrolleras före användningen.

· Handskmaterialets penetreringstid

Exakt penetreringstid fastställs av skyddshandskarnas tillverkare och skall beaktas.

· Ögonskydd:

Tättslutande skyddsglasögon

AVSNITT 9: Fysikaliska och kemiska egenskaper

· 9.1 Information om grundläggande fysikaliska och kemiska egenskaper**· Allmänna uppgifter****· Utseende:**

Form:	Lösning
Färg:	Mörkbrun
Lukt:	Alkoholaktig
Luktröskel:	Ej bestämd.

· pH-värde: Ej bestämd.

· Tillståndsändring

Smältpunkt/frys punkt:	Ej bestämd.
Initial kokpunkt och kokpunktsintervall:	78 °C

· Flampunkt: 17 °C

· Brandfarlighet (fast form, gas): Ej användbar.

· Tändtemperatur: 400 °C

· Sönderfallstemperatur: Ej bestämd.

· Självantändningstemperatur: Produkten är ej självantändande.

· Explosiva egenskaper: Produkten är ej explosionsfarlig, men bildning av explosionsfarliga ångluft-blandningar är möjlig.

· Explosionsgränser:

Nedre:	0,9 Vol %
Övre:	15,0 Vol %

· Ångtryck vid 20 °C: 59 hPa

· Densitet: Ej bestämd.

(Fortsättning på sida 6)

Säkerhetsdatablad

Enligt 1907/2006/EG, Artikel 31

Datum för utskrift: 14.04.2017

Omarbetad: 14.04.2017

Handelsnamn: EHRlich'S HEMATOXYLIN

(Fortsättning från sida 5)

· Relativ densitet	Ej bestämd.
· Ångdensitet	Ej bestämd.
· Avdunstningshastighet:	Ej bestämd.
· Löslighet i / blandbarhet med Vatten:	Fullständigt blandbar.
· Fördelningskoefficient: n-oktanol/vatten:	Ej bestämd.
· Viskositet:	
Dynamisk:	Ej bestämd.
Kinematisk:	Ej bestämd.
· Lösningsmedelhalt:	
Organiska lösningsmedel:	66,0 %
VOC (EG)	33,80 %
· 9.2 Annan information	Ingen ytterligare relevant information finns till förfogande.

AVSNITT 10: Stabilitet och reaktivitet

- **10.1 Reaktivitet** Ingen ytterligare relevant information finns till förfogande.
- **10.2 Kemisk stabilitet**
- **Termisk sönderdelning / förhållanden som bör undvikas:** Inget sönderfall vid ändamålsenlig användning.
- **10.3 Risken för farliga reaktioner** Inga farliga reaktioner kända.
- **10.4 Förhållanden som ska undvikas** Ingen ytterligare relevant information finns till förfogande.
- **10.5 Oförenliga material:** Ingen ytterligare relevant information finns till förfogande.
- **10.6 Farliga sönderdelningsprodukter:** Inga farliga sönderfallsprodukter kända.

AVSNITT 11: Toxikologisk information

- **11.1 Information om de toxikologiska effekterna**
- **Akut toxicitet**
Skadligt vid förtäring eller inandning.

- **Klassificeringsrelevanta LD/LC50-värden:**

67-56-1 metanol

Oral	LD50	5628 mg/kg (rat)
Dermal	LD50	15800 mg/kg (rabbitt)

- **Primär retningsseffekt:**
- **Frätande/irriterande på huden**
Irriterar huden.
- **Allvarlig ögonskada/ögonirritation**
Kriterierna för klassificering kan på grundval av tillgängliga data inte anses vara uppfyllda.
- **Luftvägs-/hudsensibilisering**
Kan orsaka allergi- eller astmasymtom eller andningssvårigheter vid inandning.
Kan orsaka allergisk hudreaktion.
- **CMR-effekter (cancerframkallande, mutagena och reproduktionstoxiska egenskaper)**
- **Mutagenitet i könsceller**
Misstänks kunna orsaka genetiska defekter.
- **Cancerogenitet** Kriterierna för klassificering kan på grundval av tillgängliga data inte anses vara uppfyllda.
- **Reproduktionstoxicitet**
Kriterierna för klassificering kan på grundval av tillgängliga data inte anses vara uppfyllda.

(Fortsättning på sida 7)

Säkerhetsdatablad

Enligt 1907/2006/EG, Artikel 31

Datum för utskrift: 14.04.2017

Omarbetad: 14.04.2017

Handelsnamn: EHRlich'S HEMATOXYLIN

(Fortsättning från sida 6)

- **Specifik organtoxicitet – enstaka exponering**
Kan orsaka organskador.
- **Specifik organtoxicitet – upprepad exponering**
Kriterierna för klassificering kan på grundval av tillgängliga data inte anses vara uppfyllda.
- **Fara vid aspiration** Kriterierna för klassificering kan på grundval av tillgängliga data inte anses vara uppfyllda.

AVSNITT 12: Ekologisk information

- **12.1 Toxicitet**
- **Akvatisk toxicitet:** Ingen ytterligare relevant information finns till förfogande.
- **12.2 Persistens och nedbrytbarhet** Ingen ytterligare relevant information finns till förfogande.
- **12.3 Bioackumuleringsförmåga** Ingen ytterligare relevant information finns till förfogande.
- **12.4 Rörlighet i jord** Ingen ytterligare relevant information finns till förfogande.
- **Ekotoxiska effekter:**
- **Kommentar:** Mycket giftig för fisk.
- **Ytterligare ekologiska hänvisningar:**
- **Allmänna hänvisningar:**
Vattenföroreningsklass 1 (Självutvärdering): liten risk för vattenförorening.
Låt ej tränga ner i grundvatten, vattendrag eller i avloppsnätet i utspätt tillstånd resp. i större mängder.
I vattendrag även giftig för fisk och plankton.
Mycket giftig för vattenorganismer
- **12.5 Resultat av PBT- och vPvB-bedömningen**
- **PBT:** Ej användbar.
- **vPvB:** Ej användbar.
- **12.6 Andra skadliga effekter** Ingen ytterligare relevant information finns till förfogande.

AVSNITT 13: Avfallshantering

- **13.1 Avfallsbehandlingsmetoder**
- **Rekommendation:** Får inte deponeras ihop med hushållsavfall. Får inte tömmas i avloppsnätet.
- **Ej rengjorda förpackningar:**
- **Rekommendation:** Avfallshanteras enligt myndigheters föreskrifter.
- **Rekommenderat rengöringsmedel:** Vatten, eventuellt med tillsats av rengöringsmedel.

AVSNITT 14: Transportinformation

- **14.1 UN-nummer**
- **ADR, IMDG, IATA** UN1987
- **14.2 Officiell transportbenämning**
- **ADR** 1987 ALKOHOLER, N.O.S. (ETANOL (ETYLALKOHOL), METANOL), MILJÖFARLIGT
- **IMDG** ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL)
- **IATA** ALCOHOLS, N.O.S. (ETHANOL, METHANOL)

(Fortsättning på sida 8)

Säkerhetsdatablad

Enligt 1907/2006/EG, Artikel 31

Datum för utskrift: 14.04.2017

Omarbetad: 14.04.2017

Handelsnamn: EHRlich'S HEMATOXYLIN

(Fortsättning från sida 7)

· 14.3 Faroklass för transport

· ADR



· Klass 3 Brandfarliga vätskor
 · Etikett 3

· IMDG, IATA



· Class 3 Brandfarliga vätskor
 · Label 3

· 14.4 Förpackningsgrupp

· ADR, IMDG, IATA II

· 14.5 Miljöfaror:

· Särskild märkning (ADR): Symbol (fisk och träd)

· 14.6 Särskilda skyddsåtgärder

· Varning: Brandfarliga vätskor
 · Kemler-tal: 33
 · EMS-nummer: F-E,S-D
 · Stowage Category B

· 14.7 Bulktransport enligt bilaga II till Marpol 73/78 och IBC-koden

Ej användbar.

· Transport / ytterligare uppgifter:

· ADR

· Begränsade mängder (LQ) 1L
 · Reducerade mängder (EQ) Kod: E2
 Högsta nettomängd per innerförpackning: 30 ml
 Högsta nettomängd per ytterförpackning: 500 ml
 · Transportkategori 2
 · Tunnelrestriktionskod D/E

· IMDG

· Limited quantities (LQ) 1L
 · Excepted quantities (EQ) Code: E2
 Maximum net quantity per inner packaging: 30 ml
 Maximum net quantity per outer packaging: 500 ml

· UN "Model Regulation":

UN 1987 ALKOHOLER, N.O.S. (ETANOL (ETYLALKOHOL), METANOL), 3, II, MILJÖFARLIGT

SE

(Fortsättning på sida 9)

Säkerhetsdatablad

Enligt 1907/2006/EG, Artikel 31

Datum för utskrift: 14.04.2017

Omarbetad: 14.04.2017

Handelsnamn: EHRlich'S HEMATOXYLIN

(Fortsättning från sida 8)

AVSNITT 15: Gällande föreskrifter

- **15.1 Föreskrifter/lagstiftning om ämnet eller blandningen när det gäller säkerhet, hälsa och miljö**
- **Direktiv 2012/18/EU**
- **Namngivna farliga ämnen - BILAGA I metanol**
- **Seveso-kategorier**
 - E1 Farligt för vattenmiljön
 - P5c BRANDFARLIGA VÄTSKOR
- **Tröskelvärden (i ton) för tillämpning av krav för lägre nivå 100 t**
- **Tröskelvärden (i ton) för tillämpning av krav för övre nivå 200 t**
- **Förordning (EG) nr 1907/2006 BILAGA XVII Villkor: 3**
- **15.2 Kemikaliesäkerhetsbedömning: En kemikaliesäkerhetsbedömning har ej gjorts.**

AVSNITT 16: Annan information

Uppgifterna är baserade på våra aktuella kunskaper. De representerar emellertid ingen som helst garanti beträffande produktgenskaper och utgör ingen grund för ett avtalat rättsförhållande.

- **Relevanta fraser**
 - H225 Mycket brandfarlig vätska och ånga.
 - H226 Brandfarlig vätska och ånga.
 - H302 Skadligt vid förtäring.
 - H312 Skadligt vid hudkontakt.
 - H314 Orsakar allvarliga frätskador på hud och ögon.
 - H315 Irriterar huden.
 - H332 Skadligt vid inandning.
 - H370 Orsakar organskador.
- **Förkortningar och akronymer:**
 - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 - IMDG: International Maritime Code for Dangerous Goods
 - IATA: International Air Transport Association
 - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 - EINECS: European Inventory of Existing Commercial Chemical Substances
 - ELINCS: European List of Notified Chemical Substances
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - VOC: Volatile Organic Compounds (USA, EU)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
 - PBT: Persistent, Bioaccumulative and Toxic
 - vPvB: very Persistent and very Bioaccumulative
 - Flam. Liq. 2: Brandfarliga vätskor – Kategori 2
 - Flam. Liq. 3: Brandfarliga vätskor – Kategori 3
 - Met. Corr. 1: Korrosivt för metaller – Kategori 1
 - Acute Tox. 4: Akut toxicitet – Kategori 4
 - Skin Corr. 1A: Frätande eller irriterande på huden – Kategori 1A
 - Skin Irrit. 2: Frätande eller irriterande på huden – Kategori 2
 - Resp. Sens. 1B: Luftvägssensibilisering – Kategori 1B
 - Skin Sens. 1B: Hudsensibilisering – Kategori 1B
 - Muta. 2: Mutagenitet i könsceller – Kategori 2
 - STOT SE 1: Specifik organotoxicitet (enstaka exponering) – Kategori 1
 - STOT SE 2: Specifik organotoxicitet (enstaka exponering) – Kategori 2
 - Aquatic Acute 1: Farligt för vattenmiljön - akut fara – Kategori 1