

# Safety Data Sheet

acc. to OSHA HCS

Printing date 02/22/2016

Reviewed on 06/02/2015

## 1 Identification

- **Product identifier**
- **Trade name:** GILL'S HEMATOXYLIN 3
- **Article number:** 26030-30, 15285-03, 26030-34
- **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**



GHS05 Corrosion

Eye Dam. 1 H318 Causes serious eye damage.

Flam. Liq. 4 H227 Combustible liquid.

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



GHS05

- **Signal word** Danger
- **Hazard-determining components of labeling:**  
 aluminium sulphate  
 Acetic Acid Glacial
- **Hazard statements**  
 Combustible liquid.  
 Causes serious eye damage.
- **Precautionary statements**  
 Keep away from flames and hot surfaces. – No smoking.  
 Wear protective gloves / eye protection / face protection.  
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
 Continue rinsing.  
 Immediately call a POISON CENTER/doctor.  
 In case of fire: Use for extinction: CO2, powder or water spray.  
 Store in a well-ventilated place. Keep cool.  
 Dispose of contents/container in accordance with local/regional/national/international regulations.

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- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



- **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:**

107-21-1	ethanediol	25-50%
64-19-7	Acetic Acid Glacial	2,5-10%
10043-01-3	aluminium sulphate	2,5-10%

### 4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** If symptoms persist consult 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.

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, 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:** No special measures required.

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## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **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).  
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:** Protect from heat.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** 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:**

### 107-21-1 ethanediol

TLV	Long-term value: NIC-10* mg/m <sup>3</sup> Ceiling limit value: (100) mg/m <sup>3</sup> (H);*as inhalable fraction and vapor
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### 64-19-7 Acetic Acid Glacial

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

### 10043-01-3 aluminium sulphate

REL	Long-term value: 2 mg/m <sup>3</sup> as Al
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TLV	Long-term value: 1* mg/m <sup>3</sup> as Al; *as respirable fraction
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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:**

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

· **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:**

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: Liquid

Color: Red

· **Odor:** Characteristic

· **Odor threshold:** Not determined.

· **pH-value at 20 °C (68 °F):** 5

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 100 °C (212 °F)

· **Flash point:** 93 °C (199 °F)

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

· **Ignition temperature:** 410 °C (770 °F)

· **Decomposition temperature:** Not determined.

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· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	3.2 Vol %
<b>Upper:</b>	53.0 Vol %
· <b>Vapor pressure at 20 °C (68 °F):</b>	23 hPa (17 mm Hg)
· <b>Density:</b>	Not determined.
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Fully miscible.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	6.0 %
<b>Water:</b>	62.5 %
<b>VOC content:</b>	6.0 %
	159.8 g/l / 1.33 lb/gl
<b>Solids content:</b>	5.0 %
· <b>Other information</b>	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:**

### 107-21-1 ethanediol

Oral	LD50	5840 mg/kg (rat)
Dermal	LD50	9530 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Strong irritant with the danger of severe eye injury.

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- **Sensitization:** No sensitizing effects known.
  - **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Irritant
  - **Carcinogenic categories**
- |  |
|--|
| · <b>IARC (International Agency for Research on Cancer)</b>  |
| None of the ingredients is listed.                           |
| · <b>NTP (National Toxicology Program)</b>                   |
| None of the ingredients is listed.                           |
| · <b>OSHA-Ca (Occupational Safety Health Administration)</b> |
| 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.
- **Ecotoxic effects:**
- **Remark:** 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.  
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

- |                              |        |
|------------------------------|--------|
| · <b>UN-Number</b>           | Void   |
| · <b>DOT, ADR, ADN, IATA</b> | UN3082 |
| · <b>IMDG</b>                |        |

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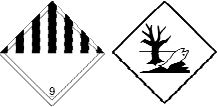
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<ul style="list-style-type: none"> <li>· <b>UN proper shipping name</b></li> <li>· <b>DOT, ADR, ADN, IATA</b></li> <li>· <b>IMDG</b></li> </ul>	<p>Void</p> <p><b>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (aluminium sulphate), MARINE POLLUTANT</b></p>
<ul style="list-style-type: none"> <li>· <b>Transport hazard class(es)</b></li> <li>· <b>DOT, ADR, ADN, IATA</b></li> <li>· <b>Class</b></li> </ul>	<p>Void</p>
<ul style="list-style-type: none"> <li>· <b>IMDG</b></li> </ul> 	<p>9 Miscellaneous dangerous substances and articles</p> <p>9</p>
<ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>	<p>9 Miscellaneous dangerous substances and articles</p> <p>9</p>
<ul style="list-style-type: none"> <li>· <b>Packing group</b></li> <li>· <b>DOT, ADR, IATA</b></li> <li>· <b>IMDG</b></li> </ul>	<p>Void</p> <p>III</p>
<ul style="list-style-type: none"> <li>· <b>Environmental hazards:</b></li> <li>· <b>Marine pollutant:</b></li> </ul>	<p>Product contains environmentally hazardous substances: aluminium sulphate</p> <p>Yes</p> <p>Symbol (fish and tree)</p>
<ul style="list-style-type: none"> <li>· <b>Special precautions for user</b></li> <li>· <b>EMS Number:</b></li> </ul>	<p>Not applicable.</p> <p>F-A,S-F</p>
<ul style="list-style-type: none"> <li>· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b></li> </ul>	<p>Not applicable.</p>
<ul style="list-style-type: none"> <li>· <b>Transport/Additional information:</b></li> </ul>	
<ul style="list-style-type: none"> <li>· <b>IMDG</b></li> <li>· <b>Limited quantities (LQ)</b></li> <li>· <b>Excepted quantities (EQ)</b></li> </ul>	<p>5L</p> <p>Code: E1</p> <p>Maximum net quantity per inner packaging: 30 ml</p> <p>Maximum net quantity per outer packaging: 1000 ml</p>
<ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>	<p>Void</p>

## 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):**

107-21-1 | ethanediol

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

All ingredients are listed.

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· **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.

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

None of the ingredients is listed.

· **Carcinogenic categories**· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

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

107-21-1 ethanediol

A4

· **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**

GHS05

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

aluminium sulphate

Acetic Acid Glacial

· **Hazard statements**

Combustible liquid.

Causes serious eye damage.

· **Precautionary statements**

Keep away from flames and hot surfaces. – No smoking.

Wear protective gloves / eye protection / face protection.

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

Continue rinsing.

Immediately call a POISON CENTER/doctor.

In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.

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** 02/22/2016 / -

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**· 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**

**Flam. Liq. 4: Flammable liquids, Hazard Category 4**

**Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1**

US

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



Printing date 02.06.2015

Revision: 02.06.2015

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

- **Product identifier**
- **Trade name:** GILL'S HEMATOXYLIN 3
- **Article number:** 26030-30, 15285-03, 26030-34
- **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 Hazards identification

- **Classification of the substance or mixture**
  - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
  -  **Irritant**  
Risk of serious damage to eyes.
  -  **Dangerous for the environment**  
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
  - **Information concerning particular hazards for human and environment:**  
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
  - **Classification system:**  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- 
- **Label elements**
  - **Labelling according to EU guidelines:**  
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

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AU

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 02.06.2015

Revision: 02.06.2015

Trade name: **GILL'S HEMATOXYLIN 3**

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· **Code letter and hazard designation of product:**



Irritant  
Dangerous for the environment

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

ethanediol

· **Risk phrases:**

Risk of serious damage to eyes.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Information concerning particular hazards for human and environment:**

· **Safety phrases:**

Keep away from heat.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear eye/face protection.

Use appropriate container to avoid environmental contamination.

· **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:**

107-21-1	ethanediol	25-50%
64-19-7	Acetic Acid Glacial	2.5-10%
10043-01-3	aluminium sulphate	2.5-10%

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

### 4 First aid measures

· **Description of first aid measures**

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Generally the product does not irritate the skin.

· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

· **After swallowing:** If symptoms persist consult 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:**

CO<sub>2</sub>, 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.

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# Safety data sheet

according to 1907/2006/EC, Article 31

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Trade name: **GILL'S HEMATOXYLIN 3**

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- **Advice for firefighters**
- **Protective equipment:** No special measures required.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **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).  
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

- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** Protect from heat.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** 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:**

### 107-21-1 ethanediol

NES	Short-term value: 104** mg/m <sup>3</sup> , 40** ppm Long-term value: 10* 52** mg/m <sup>3</sup> , 20** ppm Sk; *particulate; **vapour
-----	--

### 64-19-7 Acetic Acid Glacial

NES	Short-term value: 37 mg/m <sup>3</sup> , 15 ppm Long-term value: 25 mg/m <sup>3</sup> , 10 ppm
-----	---

### 10043-01-3 aluminium sulphate

NES	Long-term value: 2 mg/m <sup>3</sup> as Al
-----	---

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

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Trade name: **GILL'S HEMATOXYLIN 3**

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- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes.
- **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:**  
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:	Liquid
Colour:	Red
- **Odour:** Characteristic
- **Odour threshold:** Not determined.
- **pH-value at 20 °C:** 5
- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C
- **Flash point:** 93 °C
- **Flammability (solid, gaseous):** Not applicable.
- **Ignition temperature:** 410 °C
- **Decomposition temperature:** Not determined.
- **Self-igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.

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**Safety data sheet**  
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· <b>Explosion limits:</b>	
<b>Lower:</b>	3.2 Vol %
<b>Upper:</b>	53.0 Vol %
· <b>Vapour pressure at 20 °C:</b>	23 hPa
· <b>Density:</b>	Not determined.
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with water:</b>	Fully miscible.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	6.0 %
<b>Water:</b>	62.5 %
<b>VOC (EC)</b>	6.00 %
<b>Solids content:</b>	5.0 %
· <b>Other information</b>	No further relevant information available.

### 10 Stability and reactivity

- **Reactivity**
- **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:**

· <b>LD/LC50 values relevant for classification:</b>		
<b>107-21-1 ethanediol</b>		
Oral	LD50	5840 mg/kg (rat)
Dermal	LD50	9530 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitisation:** No sensitising effects known.
- **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:

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**Safety data sheet**  
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Irritant

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**12 Ecological information**

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** 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.  
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**

- |                                     |   |
|-------------------------------------|---|
| · <b>UN-Number</b>                  |   |
| · <b>ADG, ADN, IATA</b>             | Void  |
| · <b>IMDG</b>                       | UN3082  |
| · <b>UN proper shipping name</b>    |   |
| · <b>ADG, ADN, IATA</b>             | Void  |
| · <b>IMDG</b>                       | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,<br>N.O.S. (aluminium sulphate), MARINE POLLUTANT |
| · <b>Transport hazard class(es)</b> |   |
| · <b>ADG, ADN, IATA</b>             |   |
| · <b>Class</b>                      | Void  |

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according to 1907/2006/EC, Article 31

Printing date 02.06.2015

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Trade name: **GILL'S HEMATOXYLIN 3**

(Contd. of page 6)

· **IMDG**

· **Class** 9 Miscellaneous dangerous substances and articles.  
· **Label** 9

· **Packing group** Void  
· **ADG, IATA** III  
· **IMDG** III

· **Environmental hazards:** Product contains environmentally hazardous substances: aluminium sulphate  
· **Marine pollutant:** Yes  
Symbol (fish and tree)

· **Special precautions for user** Not applicable.  
· **EMS Number:** F-A,S-F

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

· **Transport/Additional information:**

· **IMDG**  
· **Limited quantities (LQ)** 5L  
· **Excepted quantities (EQ)** Code: E1  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 1000 ml

### 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**

107-21-1	ethanediol	S5+APPENDIX C, S6+APPENDIX C
64-19-7	Acetic Acid Glacial	S2, S5, S6

· **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· **Code letter and hazard designation of product:**

Irritant  
Dangerous for the environment

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

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

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**Trade name: GILL'S HEMATOXYLIN 3**

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**· Risk phrases:***Risk of serious damage to eyes.**Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.***· Safety phrases:***Keep away from heat.**In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.**Wear eye/face protection.**Use appropriate container to avoid environmental contamination.***· 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.*

AU

# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/02/2015

Reviewed on 06/02/2015

## 1 Identification

- **Product identifier**
- **Trade name:** GILL'S HEMATOXYLIN 3
- **Article number:** 26030-30, 15285-03, 26030-34
- **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
- **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**



GHS05 Corrosion

Eye Dam. 1 H318 Causes serious eye damage.

H227 Combustible liquid.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Irritant

Risk of serious damage to eyes.



Dangerous for the environment

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- **Information concerning particular hazards for human and environment:**

The product has to be labeled due to the calculation procedure of international guidelines.

- **Classification system:**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- **Label elements**

- **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with directives on hazardous materials.

- **Code letter and hazard designation of product:**



Irritant

Dangerous for the environment

(Contd. on page 2)

CA

# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/02/2015

Reviewed on 06/02/2015

Trade name: **GILL'S HEMATOXYLIN 3**

(Contd. of page 1)

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

ethanediol

- **Risk phrases:**

Risk of serious damage to eyes.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- **Safety phrases:**

Keep away from heat.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear eye/face protection.

Use appropriate container to avoid environmental contamination.

- **Hazard description:**

- **WHMIS-symbols:**

B3 - Combustible liquid

D2B - Toxic material causing other toxic effects



- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 1

Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = 2

Fire = 1

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:**

107-21-1	ethanediol	10-30%
64-19-7	Acetic Acid Glacial	3-7%
10043-01-3	aluminium sulphate	1-5%

### 4 First-aid measures

- **Description of first aid measures**

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.

- **After skin contact:** Generally the product does not irritate the skin.

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**Trade name: GILL'S HEMATOXYLIN 3**

(Contd. of page 2)

- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** If symptoms persist consult 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:**  
CO<sub>2</sub>, 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:** No special measures required.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **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).  
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

- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** Protect from heat.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** 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.

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# Safety Data Sheet

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Reviewed on 06/02/2015

Trade name: **GILL'S HEMATOXYLIN 3**

(Contd. of page 3)

- **Control parameters**

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

**107-21-1 ethanediol**

EL	Short-term value: 20** mg/m <sup>3</sup> Long-term value: 10** mg/m <sup>3</sup> Ceiling limit value: 100* mg/m <sup>3</sup> , 50*** ppm *Aerosol; **Particulate; ***Vapour
EV	Ceiling limit value: 100 mg/m <sup>3</sup>

**64-19-7 Acetic Acid Glacial**

EL	Short-term value: 15 ppm Long-term value: 10 ppm
EV	Short-term value: 37 mg/m <sup>3</sup> , 15 ppm Long-term value: 25 mg/m <sup>3</sup> , 10 ppm

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

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

- **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:**

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:** Liquid

**Color:** Red

· **Odor:** Characteristic

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# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/02/2015

Reviewed on 06/02/2015

Trade name: **GILL'S HEMATOXYLIN 3**

(Contd. of page 4)

· <b>Odour threshold:</b>	Not determined.
· <b>pH-value at 20 °C:</b>	5
· <b>Change in condition</b>	
<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	100 °C
· <b>Flash point:</b>	93 °C
· <b>Flammability (solid, gaseous):</b>	Not flammable.
· <b>Ignition temperature:</b>	410 °C
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	3.2 Vol %
<b>Upper:</b>	53.0 Vol %
· <b>Vapor pressure at 20 °C:</b>	23 hPa
· <b>Density:</b>	Not determined.
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with</b>	
<b>Water:</b>	Fully miscible.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	6.0 %
<b>Water:</b>	62.5 %
<b>Solids content:</b>	5.0 %
· <b>Other information</b>	No further relevant information available.

## 10 Stability and reactivity

- **Reactivity**
- **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.

CA

(Contd. on page 6)

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acc. to OSHA HCS

Printing date 06/02/2015

Reviewed on 06/02/2015

Trade name: **GILL'S HEMATOXYLIN 3**

(Contd. of page 5)

## 11 Toxicological information

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

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

### 107-21-1 ethanediol

Oral	LD50	5840 mg/kg (rat)
Dermal	LD50	9530 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Irritant

- **Carcinogenic categories**

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

None of the ingredients is listed.

- **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.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** 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.  
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.

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# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/02/2015


Reviewed on 06/02/2015

Trade name: GILL'S HEMATOXYLIN 3

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- **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"> <li>· <b>UN-Number</b></li> <li>· <b>DOT, TDG, ADN, IATA</b></li> <li>· <b>IMDG</b></li> </ul>	<p style="text-align: center;">Void UN3082</p>
<ul style="list-style-type: none"> <li>· <b>UN proper shipping name</b></li> <li>· <b>DOT, TDG, ADN, IATA</b></li> <li>· <b>IMDG</b></li> </ul>	<p style="text-align: center;">Void ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (aluminium sulphate), MARINE POLLUTANT</p>
<ul style="list-style-type: none"> <li>· <b>Transport hazard class(es)</b></li> <li>· <b>DOT, TDG, ADN, IATA</b></li> <li>· <b>Class</b></li> </ul>	<p style="text-align: center;">Void</p>
<ul style="list-style-type: none"> <li>· <b>IMDG</b></li> </ul> <div style="text-align: center;">  </div>	<p style="text-align: center;">9 Miscellaneous dangerous substances and articles 9</p>
<ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>	<p style="text-align: center;">9 Miscellaneous dangerous substances and articles 9</p>
<ul style="list-style-type: none"> <li>· <b>Packing group</b></li> <li>· <b>DOT, TDG, IATA</b></li> <li>· <b>IMDG</b></li> </ul>	<p style="text-align: center;">Void III</p>
<ul style="list-style-type: none"> <li>· <b>Environmental hazards:</b></li> <li>· <b>Marine pollutant:</b></li> </ul>	<p style="text-align: center;">Product contains environmentally hazardous substances: aluminium sulphate Yes Symbol (fish and tree)</p>
<ul style="list-style-type: none"> <li>· <b>Special precautions for user</b></li> <li>· <b>EMS Number:</b></li> </ul>	<p style="text-align: center;">Not applicable. F-A,S-F</p>
<ul style="list-style-type: none"> <li>· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b></li> </ul>	<p style="text-align: center;">Not applicable.</p>
<ul style="list-style-type: none"> <li>· <b>Transport/Additional information:</b></li> </ul>	<p style="text-align: center;">-</p>
<ul style="list-style-type: none"> <li>· <b>IMDG</b></li> <li>· <b>Limited quantities (LQ)</b></li> <li>· <b>Excepted quantities (EQ)</b></li> </ul>	<p style="text-align: center;">5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml</p>
<ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>	<p style="text-align: center;">-</p>

CA

(Contd. on page 8)



# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/02/2015

Reviewed on 06/02/2015

Trade name: **GILL'S HEMATOXYLIN 3**

(Contd. of page 7)

## 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):**

107-21-1 ethanediol

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

All ingredients are listed.

· **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.

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

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

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

107-21-1 ethanediol

A4

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

None of the ingredients is listed.

· **Canadian substance listings:**

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

All ingredients are listed.

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

None of the ingredients is listed.

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

107-21-1 ethanediol

64-19-7 Acetic Acid Glacial

· **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

· **Hazard symbols:**



Irritant

Dangerous for the environment

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

ethanediol

(Contd. on page 9)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 06/02/2015

Reviewed on 06/02/2015

**Trade name: GILL'S HEMATOXYLIN 3**

(Contd. of page 8)

· **Risk phrases:**

*Risk of serious damage to eyes.*

*Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.*

· **Safety phrases:**

*Keep away from heat.*

*In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.*

*Wear eye/face protection.*

*Use appropriate container to avoid environmental contamination.*

· **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** 06/02/2015 / -

· **Abbreviations and acronyms:**

*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)*

*WHMIS: Workplace Hazardous Materials Information System (Canada)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

*: Flammable liquids, Hazard Category 4*

*Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1*

CA

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

Printing date 02.06.2015

Revision: 02.06.2015

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

- **1.1 Product identifier**
- **Trade name:** GILL'S HEMATOXYLIN 3
- **Article number:** 26030-30, 15285-03, 26030-34
- **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**



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.

- **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**



GHS05

- **Signal word** *Danger*
- **Hazard-determining components of labelling:**  
*aluminium sulphate*
- **Hazard statements**  
*H318 Causes serious eye damage.*
- **Precautionary statements**
  - P280*                    *Wear protective gloves/protective clothing/eye protection/face protection.*
  - P305+P351+P338* *IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*
  - P310*                    *Immediately call a POISON CENTER/doctor.*
  - P403+P235*           *Store in a well-ventilated place. Keep cool.*
  - P501*                    *Dispose of contents/container in accordance with local/regional/national/international regulations.*

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# Safety data sheet

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- **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: 107-21-1 EINECS: 203-473-3	ethanediol ⚠ Acute Tox. 4, H302	25-50%
CAS: 64-19-7 EINECS: 200-580-7	Acetic Acid Glacial ⚠ Flam. Liq. 3, H226; ⚠ Skin Corr. 1A, H314	2.5-10%
CAS: 10043-01-3 EINECS: 233-135-0	aluminium sulphate ⚠ Eye Dam. 1, H318	2.5-10%

## SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **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:**  
CO<sub>2</sub>, 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:** No special measures required.

## SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **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).  
Ensure adequate ventilation.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.

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See Section 8 for information on personal protection equipment.  
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:** Protect from heat.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** 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:**

**107-21-1 ethanediol**

WEL	Short-term value: 104** mg/m <sup>3</sup> , 40** ppm
	Long-term value: 10* 52** mg/m <sup>3</sup> , 20** ppm
	Sk *particulate **vapour

- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes.
- **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:**  
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.

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· **Eye protection:**

Tightly sealed goggles

### SECTION 9: Physical and chemical properties

#### · 9.1 Information on basic physical and chemical properties

##### · General Information

##### · Appearance:

Form:	Liquid
Colour:	Red
· Odour:	Characteristic
· Odour threshold:	Not determined.

· pH-value at 20 °C: 5

##### · Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C

· Flash point: 93 °C

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature: 410 °C

· Decomposition temperature: Not determined.

· Self-igniting: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

##### · Explosion limits:

Lower:	3.2 Vol %
Upper:	53.0 Vol %

· Vapour pressure at 20 °C: 23 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:	6.0 %
Water:	62.5 %
VOC (EC)	6.00 %

Solids content: 5.0 %

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

### SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **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:**

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

#### 107-21-1 ethanediol

Oral	LD50	5840 mg/kg (rat)
Dermal	LD50	9530 mg/kg (rabbit)

- **Primary irritant effect:**

- **on the skin:** No irritant effect.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitisation:** No sensitising effects known.

- **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:

Irritant

### 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:** 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.

Toxic for aquatic organisms

- **12.5 Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

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· **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, ADN, IATA**

Void

· **IMDG**

UN3082

· **14.2 UN proper shipping name**· **ADR, ADN, IATA**

Void

· **IMDG**ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (aluminium sulphate), MARINE POLLUTANT· **14.3 Transport hazard class(es)**· **ADR, ADN, IATA**· **Class**

Void

· **IMDG**· **Class**

9 Miscellaneous dangerous substances and articles.

· **Label**

9

· **14.4 Packing group**· **ADR, IATA**

Void

· **IMDG**

III

· **14.5 Environmental hazards:**Product contains environmentally hazardous substances:  
aluminium sulphate· **Marine pollutant:**

Yes

Symbol (fish and tree)

· **14.6 Special precautions for user**

Not applicable.

· **EMS Number:**

F-A,S-F

· **14.7 Transport in bulk according to Annex II of  
MARPOL73/78 and the IBC Code**

Not applicable.

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· **Transport/Additional information:**· **IMDG**· **Limited quantities (LQ)**

5L

· **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· **UN "Model Regulation":**

-

**SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No further relevant information available.
- **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***H226 Flammable liquid and vapour.**H302 Harmful if swallowed.**H314 Causes severe skin burns and eye damage.**H318 Causes serious eye damage.*· **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**Flam. Liq. 3: Flammable liquids, Hazard Category 3**Acute Tox. 4: Acute toxicity, Hazard Category 4**Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A**Eye Dam. 1: Serious eye damage/eye irritation, 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 2015.06.02

在 2015.06.02 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:** GILL'S HEMATOXYLIN 3
- **商品编号:** 26030-30, 15285-03, 26030-34
- **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:**

红色, 液体

- **GHS危险性类别**



腐蚀

严重眼睛损伤/眼睛刺激性 第1类 H318 引起严重的眼睛损伤



环境

对水环境的危害(慢性) 第2类 H411 对水生生物有毒并且有长期持续影响

易燃液体 第4类 H227 可燃液体

- **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**



GHS05 GHS09

- **名称** 危险

- **标签上辨别危险的成份:**

硫酸铝

- **危险字句**

可燃液体

引起严重的眼睛损伤

对水生生物有毒并且有长期持续影响

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# 化学品安全技术说明书

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**化学品中文(英文)名称, 化学品俗名或商品名 : GILL'S HEMATOXYLIN 3**

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**· 警戒字句**
**· 预防措施**

远离热源/火花/明火/热表面。 - 禁止吸烟。  
戴防护手套/穿防护服/戴防护眼罩/戴防护面具。

**· 事故响应**

如进入眼睛：用水小心冲洗几分钟。如戴隐型眼镜并可方便地取出，取出隐型眼镜。继续冲洗。  
立即呼叫解毒中心/医生

**· 安全贮存**

存放在通风良好的地方。保持低温。

**· 废弃处置**

按照本地 / 地区 / 国家 / 国际规例处理内含物 / 容器。

**· 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

**· 危险的成分:**

107-21-1	1,2-乙二醇 ⚠ 急性毒性(经口) 第4类, H302	25-50%
64-19-7	乙酸 ⚠ 易燃液体 第3类, H226; ⚠ 皮肤腐蚀/刺激 第1A类, H314	2.5-10%
10043-01-3	硫酸铝 ⚠ 严重眼睛损伤/眼睛刺激性 第1类, H318; ⚠ 对水环境的危害(急性) 第1类, H400; 对水环境的危害(慢性) 第1类, H410	2.5-10%

### 4 急救措施

**· 应急措施要领**

- 吸入: 供给新鲜空气;如果病人感到不适时要询问医生。
- 皮肤接触: 一般的产品不会刺激皮肤。
- 眼睛接触: 张开眼睛在流水下冲洗数分钟。然后咨询医生。
- 食入: 如果症状仍然持续,请咨询医生。
- 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 (CO<sub>2</sub>)、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: 没有要求特别的措施。

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### 6 泄漏应急处理

- **保护措施** 没有要求.
- **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).  
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.

### 7 操作处置与储存

- **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:** 防热.
- **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:** 没有特别的要求.  
· **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:** 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

#### 107-21-1 1,2-乙二醇

OEL (RC)	PC-STEL: 40 mg/m <sup>3</sup> PC-TWA: 20 mg/m <sup>3</sup>
PEL (TW)	PC-TWA: 10* 127** mg/m <sup>3</sup> , 50** ppm *mist **vapor

#### 64-19-7 乙酸

OEL (RC)	PC-STEL: 20 mg/m <sup>3</sup> PC-TWA: 10 mg/m <sup>3</sup>
PEL (TW)	PC-TWA: 25 mg/m <sup>3</sup> , 10 ppm

- **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:**  
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.

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避免和眼睛接触.

· **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.

· **手防护:**

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:** 液体

· **颜色:** 红色

· **气味:** 有特性的

· **嗅觉阈限** 未决定.

· **pH值 在 20 °C:** 5

· **条件的更改**

· **熔点:** 未确定的

· **沸点/初沸点和沸程:** 100 °C

· **闪点:** 93 °C

· **可燃性 (固体、气体):** 不适用的

· **点火温度:** 410 °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:** 该产品并没有爆炸的危险

· **爆炸极限:**

· **较低:** 3.2 Vol %

· **较高:** 53.0 Vol %

· **蒸气压 在 20 °C:** 23 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.

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打印日期 2015.06.02

在 2015.06.02 审核

化学品中文(英文)名称, 化学品俗名或商品名 : GILL'S HEMATOXYLIN 3

(在 4 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: 6.0 %
  - 水: 62.5 %
- **固体成份:** 5.0 %
- **其他信息** 无相关详细资料。

## 10 稳定性和反应性

- **反应性**
- **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:**

107-21-1 1,2-乙二醇

口腔	LD50	5840 mg/kg (rat)
皮肤	LD50	9530 mg/kg (rabbit)

- **主要的刺激性影响:**
- **皮肤:** 没有刺激性影响.
- **在眼睛上面:** 强烈的刺激性和造成严重伤害眼睛的危险.
- **致敏作用:** 没有已知的敏化影响.
- **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:  
刺激性的

## 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。
- **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:** 对鱼类有毒

(在 6 页继续)

-CN

# 化学品安全技术说明书

根据 GB/T 16483-2008, GB/T 17519-2013

打印日期 2015.06.02

在 2015.06.02 审核

化学品中文(英文)名称, 化学品俗名或商品名 : GILL'S HEMATOXYLIN 3


(在 5 页继续)

- 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

<ul style="list-style-type: none"> <li>· 联合国危险货物编号(UN号)</li> <li>· ADR, ADN, IATA</li> <li>· IMDG</li> </ul>	无效 UN3082
<ul style="list-style-type: none"> <li>· UN适当装船名</li> <li>· ADR, ADN, IATA</li> <li>· IMDG</li> </ul>	无效 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (aluminium sulphate), MARINE POLLUTANT
<ul style="list-style-type: none"> <li>· 运输危险等级</li> <li>· ADR, ADN, IATA</li> <li>· 级别</li> </ul>	无效
<ul style="list-style-type: none"> <li>· IMDG</li> </ul>	
	
<ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>	9 不同危险的物质和物体 9
<ul style="list-style-type: none"> <li>· 包装组别</li> <li>· ADR, IATA</li> <li>· IMDG</li> </ul>	无效 III
<ul style="list-style-type: none"> <li>· 危害环境:</li> <li>· 海运污染物质:</li> </ul>	该产品含有对环境有害的原料: 硫酸铝 是 象征符号 (鱼和树)
<ul style="list-style-type: none"> <li>· 用户特别预防措施</li> </ul>	不适用的

(在 7 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 2015.06.02

在 2015.06.02 审核

化学品中文(英文)名称, 化学品俗名或商品名: GILL'S HEMATOXYLIN 3

(在 6 页继续)

· EMS 号码:	F-A,S-F
· 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:	
· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "标准规定":	-

## 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。
- 危险象形图表



GHS05 GHS09

- 名称 危险

- 标签上辨别危险的成份:

硫酸铝

- 危险字句

可燃液体

引起严重的眼睛损伤

对水生生物有毒并且有长期持续影响

- 警戒字句

- 预防措施

远离热源/火花/明火/热表面。 - 禁止吸烟。

戴防护手套/穿防护服/戴防护眼罩/戴防护面具。

- 事故响应

如进入眼睛: 用水小心冲洗几分钟。如戴隐型眼镜并可方便地取出, 取出隐型眼镜。继续冲洗。

立即呼叫解毒中心/医生

- 安全贮存

存放在通风良好的地方。保持低温。

- 废弃处置

按照本地 / 地区 / 国家 / 国际规例处理内含物 / 容器。

- 化学物质安全性评价: 尚未进行化学物质安全性评价

CN

(在 8 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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**化学品中文(英文)名称, 化学品俗名或商品名 : GILL'S HEMATOXYLIN 3**

(在 7 页继续)

## 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

易燃液体 第3类: Flammable liquids, Hazard Category 3

易燃液体 第4类: Flammable liquids, Hazard Category 4

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

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

严重眼睛损伤/眼睛刺激性 第1类: Serious eye damage/eye irritation, Hazard Category 1

对水环境的危害(急性) 第1类: Hazardous to the aquatic environment - Acute Hazard, Category 1

对水环境的危害(慢性) 第1类: Hazardous to the aquatic environment - Chronic Hazard, Category 1

对水环境的危害(慢性) 第2类: Hazardous to the aquatic environment - Chronic Hazard, Category 2

CN

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 02.06.2015

Herziening van: 02.06.2015

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

- **1.1 Productidentificatie**
- **Handelsnaam:** GILL'S HEMATOXYLIN 3
- **Artikelnummer:** 26030-30, 15285-03, 26030-34
- **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
- **Inlichtingengevende 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**



GHS05 corrosie

Eye Dam. 1 H318 Veroorzaakt ernstig oogletsel.

- **2.2 Etiketteringselementen**
- **Etikettering overeenkomstig Verordening (EG) nr. 1272/2008**  
Het product is geclassificeerd en geëtiketteerd volgens de CLP-verordening.
- **Gevarenpictogrammen**



GHS05

- **Signaalwoord** Gevaar
- **Gevaaraanduidende componenten voor de etikettering:**  
aluminiumsulfaat
- **Gevarenaanduidingen**  
H318 Veroorzaakt ernstig oogletsel.

(Vervolg op blz. 2)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 02.06.2015

Herziening van: 02.06.2015

**Handelsnaam: GILL'S HEMATOXYLIN 3**

(Vervolg van blz. 1)

### · Voorzorgsmaatregelen

- P280 Beschermende handschoenen/beschermende kleding/oogbescherming/gelaatsbescherming dragen.
- P305+P351+P338 BIJ CONTACT MET DE OGEN: voorzichtig afspoelen met water gedurende een aantal minuten; contactlenzen verwijderen, indien mogelijk; blijven spoelen.
- P310 Onmiddellijk een ANTIGIFCENTRUM/arts raadplegen.
- P403+P235 Op een goed geventileerde plaats bewaren. Koel 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.

## 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: 107-21-1	1,2-ethaandiol	25-50%
EINECS: 203-473-3	⚠ Acute Tox. 4, H302	
CAS: 64-19-7	azijnzuur	2,5-10%
EINECS: 200-580-7	⚠ Flam. Liq. 3, H226; ⚠ Skin Corr. 1A, H314	
CAS: 10043-01-3	aluminiumsulfaat	2,5-10%
EINECS: 233-135-0	⚠ Eye Dam. 1, H318	

## RUBRIEK 4: Eerstehulpmaatregelen

### · 4.1 Beschrijving van de eerstehulpmaatregelen

- Na het inademen: Frisse lucht toedienen; bij klachten arts ontbieden.
- Na huidcontact: Over het algemeen is het produkt niet prikkelend voor de huid
- Na oogcontact: Ogen met open ooglid een aantal minuten onder stromend water afspoelen en dokter raadplegen.
- Na inslikken: Als de klachten niet minderen, een 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:

CO<sub>2</sub>, 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: Geen bijzondere maatregelen nodig.

NL

(Vervolg op blz. 3)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 02.06.2015

Herziening van: 02.06.2015

Handelsnaam: GILL'S HEMATOXYLIN 3

(Vervolg van blz. 2)

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

- **6.1 Persoonlijke voorzorgsmaatregelen, beschermde uitrusting en noodprocedures** Niet nodig.
- **6.2 Milieuvoorzorgsmaatregelen:**  
Bij indringen in afvalwater of riolering moet de bevoegde instantie gewaarschuwd worden.  
Met veel water verdunnen.  
Niet in de riolering/het oppervlaktewater/het grondwater laten terechtkomen.
- **6.3 Insluitings- en reinigingsmethoden en -materiaal:**  
Met vloeistofbindend materiaal (zand, bergmeel, zuurbinder, universele binder, zaagmeel) opnemen.  
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:** Beschermen tegen hitte.
- **7.2 Voorwaarden voor een veilige opslag, met inbegrip van incompatibele producten**
- **Opslag:**  
· **Eisen ten opzichte van opslagruimte en tanks:** Geen bijzondere eisen.  
· **Informatie m.b.t. gezamenlijke opslag:** Niet noodzakelijk.
- **Verdere inlichtingen over eisen m.b.t. de opslag:** 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:**

#### 107-21-1 1,2-ethaandiol

WG	Korte termijn waarde: 104* mg/m <sup>3</sup> , 40* ppm
	Lange termijn waarde: 52* 10** mg/m <sup>3</sup> , 20* 4** ppm
	*damp **druppels

- **Aanvullende gegevens:** Als basis dienden lijsten die bij opstelling geldig waren.
- **8.2 Maatregelen ter beheersing van blootstelling**
- **Persoonlijke beschermingsvoorzieningen:**
- **Algemene beschermings- en gezondheidsmaatregelen:**  
Verontreinigde kleding onmiddellijk uittrekken.  
Vóór de pauze en aan het einde van werktijd handen wassen.  
Aanraking met de ogen vermijden.
- **Ademhalingsbescherming:**  
Bij korte of geringe belasting ademfiltertoestel; bij intensieve resp. langdurige expositie een van de omringende lucht onafhankelijk ademhalingsstoestel gebruiken.

(Vervolg op blz. 4)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 02.06.2015

Herziening van: 02.06.2015

**Handelsnaam: GILL'S HEMATOXYLIN 3**

(Vervolg van blz. 3)

- **Handbescherming:**

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:**

<b>Vorm:</b>	Vloeistof
<b>Kleur:</b>	Rood
<b>Reuk:</b>	Karakteristiek
<b>Geurdrempelwaarde:</b>	Niet bepaald.

- **pH-waarde bij 20 °C:** 5

- **Toestandsverandering**

<b>Smeltpunt/smeltbereik:</b>	Niet bepaald.
<b>Kookpunt/kookpuntbereik:</b>	100 °C

- **Vlampunt:** 93 °C

- **Ontvlambaarheid (vast, gasvormig):** Niet bruikbaar.

- **Ontstekingsstemperatuur:** 410 °C

- **Ontbindingstemperatuur:** Niet bepaald.

- **Zelfonsteking:** Het produkt ontbrandt niet uit zichzelf.

- **Ontploffingsgevaar:** Het produkt is niet ontploffingsgevaarlijk.

- **Ontploffingsgrenzen:**

<b>Onderste:</b>	3,2 Vol %
<b>Bovenste:</b>	53,0 Vol %

- **Dampspanning bij 20 °C:** 23 hPa

- **Dichtheid:** Niet bepaald.

- **Relatieve dichtheid** Niet bepaald.

- **Dampdichtheid** Niet bepaald.

- **Verdampingsnelheid** Niet bepaald.

(Vervolg op blz. 5)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 02.06.2015

Herziening van: 02.06.2015

**Handelsnaam: GILL'S HEMATOXYLIN 3**

(Vervolg van blz. 4)

- |   |   |
|---|---|
| · <b>Oplosbaarheid in/mengbaarheid met Water:</b> | Volledig mengbaar.                              |
| · <b>Verdelingscoëfficiënt (n-octanol/water):</b> | Niet bepaald.                                   |
| · <b>Viscositeit</b>                              |   |
| <b>Dynamisch:</b>                                 | Niet bepaald.                                   |
| <b>Kinematisch:</b>                               | Niet bepaald.                                   |
| · <b>Oplosmiddelgehalte:</b>                      |   |
| <b>Organisch oplosmiddel:</b>                     | 6,0 %   |
| <b>Water:</b>                                     | 62,5 %  |
| <b>VOC (EG)</b>                                   | 6,00 %  |
| · <b>Gehalte aan vaste bestanddelen:</b>          | 5,0 %   |
| · <b>9.2 Overige informatie</b>                   | Geen verdere relevante informatie verkrijgbaar. |

### RUBRIEK 10: Stabiliteit en reactiviteit

- **10.1 Reactiviteit**
- **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:**

· **Indelingsrelevantie LD/LC50-waarden:**

#### 107-21-1 1,2-ethaandiol

Oraal	LD50	5840 mg/kg (rat)
Dermaal	LD50	9530 mg/kg (rabbit)

- **Primaire aandoening:**
- **op de huid:** Geen prikkelend effect.
- **aan het oog:** Sterk prikkelend effect met gevaar voor ernstige oogbeschadiging.
- **Overgevoeligheid:** Geen effect van overgevoeligheid bekend.
- **Aanvullende toxicologische informatie:**  
Het produkt vertoont op grond van het berekeningsprocédé van de algemene classificatie-richtlijnen van de EG voor toebereidingen in de laatste geldige redactie de volgende gevaren:  
Irriterend

### 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.

(Vervolg op blz. 6)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 02.06.2015

Herziening van: 02.06.2015

**Handelsnaam: GILL'S HEMATOXYLIN 3**


(Vervolg van blz. 5)

- **Ecotoxische effecten:**
- **Opmerking:** Giftig voor vissen.
- **Verdere ecologische informatie:**
- **Algemene informatie:**  
Waterbezwaarlijkheid (NL) 10: Kan in het aquatisch milieu op lange termijn schadelijke effecten veroorzaken.  
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.  
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 terechtkomen.
- **Niet gereinigde verpakkingen:**
- **Aanbeveling:** Afvalverwijdering volgens overheidsbepalingen.
- **Aanbevolen reinigingsmiddel:** Water, eventueel met toevoeging van reinigingsmiddelen.

### RUBRIEK 14: Informatie met betrekking tot het vervoer

- |   |  |
|---|--|
| · <b>14.1 VN-nummer</b>   |  |
| · <b>ADR, ADN, IATA</b>   | Niet van toepassing  |
| · <b>IMDG</b>   | UN3082   |
| · <b>14.2 Juiste ladingnaam overeenkomstig de modelreglementen van de VN</b>        |  |
| · <b>ADR, ADN, IATA</b>   | Niet van toepassing  |
| · <b>IMDG</b>   | ENVIRONMENTALLY HAZARDOUS SUBSTANCE,<br>LIQUID, N.O.S. (aluminium sulphate), MARINE<br>POLLUTANT |
| · <b>14.3 Transportgevarenklasse(n)</b>   |  |
| · <b>ADR, ADN, IATA</b>   |  |
| · <b>klasse</b>   | Niet van toepassing  |
| · <b>IMDG</b>   |  |
|  |  |
| · <b>Class</b>  | 9 Diverse gevaarlijke stoffen en voorwerpen  |
| · <b>Label</b>  | 9  |
| · <b>14.4 Verpakkingsgroep:</b>   |  |
| · <b>ADR, IATA</b>  | Niet van toepassing  |
| · <b>IMDG</b>   | III  |
| · <b>14.5 Milieugevaren:</b>  | Produkt bevat milieugevaarlijke stoffen: aluminiumsulfaat  |

(Vervolg op blz. 7)

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· <b>Marine pollutant:</b>	Ja Symbool (vis en boom)
· <b>14.6 Bijzondere voorzorgen voor de gebruiker</b>	Niet bruikbaar.
· <b>EMS-nummer:</b>	F-A,S-F
· <b>14.7 Vervoer in bulk overeenkomstig bijlage II bij MARPOL 73/78 en de IBC-code</b>	Niet bruikbaar.
· <b>Transport/verdere gegevens:</b>	
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5L
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>VN "Model Regulation":</b>	-

## RUBRIEK 15: Regelgeving

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

· **SZW-lijst van kankerverwekkende stoffen**

geen der bestanddelen staat op de lijst.

· **SZW-lijst van mutagene stoffen**

geen der bestanddelen staat op de lijst.

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

geen der bestanddelen staat op de lijst.

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

10043-01-3 aluminiumsulfaat

2

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

10043-01-3 aluminiumsulfaat

x

· **Nationale voorschriften:**

· **Gevaarklasse v. water:** Waterbezwaarlijkheid (NL) 10: Saneringsinspanning A

· **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**

H226 Ontvlambare vloeistof en damp.

H302 Schadelijk bij inslikken.

H314 Veroorzaakt ernstige brandwonden en oogletsel.

H318 Veroorzaakt ernstig oogletsel.

· **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

(Vervolg op blz. 8)



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*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*  
*Flam. Liq. 3: Flammable liquids, Hazard Category 3*  
*Acute Tox. 4: Acute toxicity, Hazard Category 4*  
*Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A*  
*Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1*

NL

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

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

- **1.1 Identificateur de produit**
- **Nom du produit:** GILL'S HEMATOXYLIN 3
- **Code du produit:** 26030-30, 15285-03, 26030-34
- **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

### SECTION 2: Identification des dangers

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



GHS05 corrosion

Eye Dam. 1 H318 Provoque des lésions oculaires graves.

- **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**



GHS05

- **Mention d'avertissement** Danger
- **Composants dangereux déterminants pour l'étiquetage:**  
sulfate d'aluminium
- **Mentions de danger**  
H318 Provoque des lésions oculaires graves.
- **Conseils de prudence**
  - P280 Porter des gants de protection/des vêtements de protection/un équipement de protection des yeux/du visage.
  - P305+P351+P338 **EN CAS DE CONTACT AVEC LES YEUX:** rincer avec précaution à l'eau pendant plusieurs minutes. Enlever les lentilles de contact si la victime en porte et si elles peuvent être facilement enlevées. Continuer à rincer.
  - P310 Appeler immédiatement un CENTRE ANTIPOISON/un médecin.
  - P403+P235 Stocker dans un endroit bien ventilé. Tenir au frais.
  - P501 Éliminer le contenu/récipient conformément à la réglementation locale/régionale/nationale/internationale.

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- **2.3 Autres dangers**
- **Résultats des évaluations PBT et vPvB**
- **PBT:** Non applicable.
- **vPvB:** Non applicable.

### SECTION 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: 107-21-1 EINECS: 203-473-3	éthylène-glycol ⚠ Acute Tox. 4, H302	25-50%
CAS: 64-19-7 EINECS: 200-580-7	acide acétique ⚠ Flam. Liq. 3, H226; ⚠ Skin Corr. 1A, H314	2,5-10%
CAS: 10043-01-3 EINECS: 233-135-0	sulfate d'aluminium ⚠ Eye Dam. 1, H318	2,5-10%

### SECTION 4: Premiers secours

- **4.1 Description des premiers secours**
- **Après inhalation:** Donner de l'air frais, consulter un médecin en cas de troubles.
- **Après contact avec la peau:** En règle générale, le produit n'irrite pas la peau.
- **Après contact avec les yeux:**  
Rincer les yeux, pendant plusieurs minutes, sous l'eau courante en écartant bien les paupières et consulter un médecin.
- **Après ingestion:** Si les troubles persistent, consulter 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.

### SECTION 5: Mesures de lutte contre l'incendie

- **5.1 Moyens d'extinction**
- **Moyens d'extinction:**  
CO<sub>2</sub>, poudre d'extinction ou eau pulvérisée. Combattre les foyers importants avec de l'eau pulvérisée ou de la mousse résistante 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:** Aucune mesure particulière n'est requise.

### SECTION 6: Mesures à prendre en cas de dispersion accidentelle

- **6.1 Précautions individuelles, équipement de protection et procédures d'urgence** Pas nécessaire.
- **6.2 Précautions pour la protection de l'environnement:**  
En cas de pénétration dans les eaux ou les égouts, avvertir 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.

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- **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).  
Assurer une aération suffisante.
- **6.4 Référence à d'autres sections**  
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.

### SECTION 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 de la chaleur.
- **7.2 Conditions d'un stockage sûr, y compris d'éventuelles incompatibilités**
- **Stockage:**
- **Exigences concernant les lieux et conteneurs de stockage:** Aucune exigence particulière.
- **Indications concernant le stockage commun:** Pas nécessaire.
- **Autres indications sur les conditions de stockage:**  
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.

### SECTION 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:**

#### **107-21-1 éthylène-glycol**

<b>VME</b>	Valeur momentanée: 104 mg/m <sup>3</sup> , 40 ppm Valeur à long terme: 52 mg/m <sup>3</sup> , 20 ppm risque de pénétration percutanée
------------	---

#### **64-19-7 acide acétique**

<b>VME</b>	Valeur momentanée: 25 mg/m <sup>3</sup> , 10 ppm
------------	--

#### **10043-01-3 sulfate d'aluminium**

<b>VME</b>	Valeur à long terme: 2 mg/m <sup>3</sup>
------------	--

- **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:**

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.

- **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.

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· **Protection des mains:**

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

### SECTION 9: Propriétés physiques et chimiques

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

· **Indications générales**

· **Aspect:**

<b>Forme:</b>	Liquide
<b>Couleur:</b>	Rouge
<b>Odeur:</b>	Caractéristique
<b>Seuil olfactif:</b>	Non déterminé.

· **valeur du pH à 20 °C:** 5

· **Changement d'état**

<b>Point de fusion:</b>	Non déterminé.
<b>Point d'ébullition:</b>	100 °C

· **Point d'éclair** 93 °C

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

· **Température d'inflammation:** 410 °C

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

· **Auto-inflammation:** Le produit ne s'enflamme pas spontanément.

· **Danger d'explosion:** Le produit n'est pas explosif.

· **Limites d'explosion:**

<b>Inférieure:</b>	3,2 Vol %
<b>Supérieure:</b>	53,0 Vol %

· **Pression de vapeur à 20 °C:** 23 hPa

· **Densité:** Non déterminée.

· **Densité relative** Non déterminé.

· **Densité de vapeur.** Non déterminé.

· **Vitesse d'évaporation** Non déterminé.

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- |  |  |
|--|--|
| <b>· Solubilité dans/miscibilité avec l'eau:</b> | Entièrement miscible                               |
| <b>· Coefficient de partage (n-octanol/eau):</b> | Non déterminé.                                     |
| <b>· Viscosité:</b>                              |  |
| <b>Dynamique:</b>                                | Non déterminé.                                     |
| <b>Cinématique:</b>                              | Non déterminé.                                     |
| <b>· Teneur en solvants:</b>                     |  |
| <b>Solvants organiques:</b>                      | 6,0 %  |
| <b>Eau:</b>                                      | 62,5 %   |
| <b>VOC (CE)</b>                                  | 6,00 %   |
| <b>· Teneur en substances solides:</b>           | 5,0 %  |
| <b>· 9.2 Autres informations</b>                 | Pas d'autres informations importantes disponibles. |

### SECTION 10: Stabilité et réactivité

- **10.1 Réactivité**
- **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

### SECTION 11: Informations toxicologiques

- **11.1 Informations sur les effets toxicologiques**
- **Toxicité aiguë:**

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

#### 107-21-1 éthylène-glycol

Oral	LD50	5840 mg/kg (rat)
Dermique	LD50	9530 mg/kg (lapin)

- **Effet primaire d'irritation:**
- **de la peau:** Pas d'effet d'irritation.
- **des yeux:** Effet fortement irritant avec risque d'une affection grave des yeux.
- **Sensibilisation:** Aucun effet de sensibilisation connu.
- **Indications toxicologiques complémentaires:**  
Selon le procédé de calcul de la dernière version en vigueur de la directive générale CEE sur la classification des préparations, le produit présente les dangers suivants:  
Irritant

### SECTION 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.

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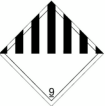

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- **Effets écotoxiques:**
- **Remarque:** Toxique chez les poissons.
- **Autres indications écologiques:**
- **Indications générales:**  
 Catégorie de pollution des eaux 1 (D) (Classification propre): peu polluant  
 Ne pas laisser le produit, non 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.  
 Toxique pour les 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.

### SECTION 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

### SECTION 14: Informations relatives au transport

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>· <b>14.1 No ONU</b></li> <li>· <b>ADR, ADN, IATA</b></li> <li>· <b>IMDG</b></li> </ul>   | <p style="text-align: center;">néant<br/>UN3082</p>  |
| <ul style="list-style-type: none"> <li>· <b>14.2 Nom d'expédition des Nations unies</b></li> <li>· <b>ADR, ADN, IATA</b></li> <li>· <b>IMDG</b></li> </ul>                             | <p style="text-align: center;">néant<br/>ENVIRONMENTALLY HAZARDOUS SUBSTANCE,<br/>LIQUID, N.O.S. (aluminium sulphate), MARINE<br/>POLLUTANT</p>  |
| <ul style="list-style-type: none"> <li>· <b>14.3 Classe(s) de danger pour le transport</b></li> <li>· <b>ADR, ADN, IATA</b></li> <li>· <b>Classe</b></li> <li>· <b>IMDG</b></li> </ul> | <p style="text-align: center;">néant</p> <hr style="border-top: 1px dashed black;"/> <div style="display: flex; align-items: center; justify-content: center;">   </div> <p style="text-align: center;">9 Matières et objets dangereux divers.<br/>9</p> |
| <ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>   | <p style="text-align: center;">9 Matières et objets dangereux divers.<br/>9</p>  |
| <ul style="list-style-type: none"> <li>· <b>14.4 Groupe d'emballage</b></li> <li>· <b>ADR, IATA</b></li> <li>· <b>IMDG</b></li> </ul>  | <p style="text-align: center;">néant<br/>III</p>   |

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· <b>14.5 Dangers pour l'environnement:</b>	<i>Le produit contient matières dangereuses pour l'environnement : sulfate d'aluminium</i>
· <b>Marine Pollutant:</b>	Oui Signe conventionnel (poisson et arbre)
· <b>14.6 Précautions particulières à prendre par l'utilisateur</b>	<i>Non applicable.</i>
· <b>No EMS:</b>	<i>F-A,S-F</i>
· <b>14.7 Transport en vrac conformément à l'annexe II de la convention Marpol 73/78 et au recueil IBC</b>	<i>Non applicable.</i>
· <b>Indications complémentaires de transport:</b>	
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	<i>5L</i>
· <b>Excepted quantities (EQ)</b>	<i>Code: E1</i> <i>Maximum net quantity per inner packaging: 30 ml</i> <i>Maximum net quantity per outer packaging: 1000 ml</i>
· <b>"Règlement type" de l'ONU:</b>	<i>-</i>

### SECTION 15: Informations réglementaires

- **15.1 Réglementations/législation particulières à la substance ou au mélange en matière de sécurité, de santé et d'environnement**  
*Pas d'autres informations importantes disponibles.*
- **15.2 Évaluation de la sécurité chimique:** *Une évaluation de la sécurité chimique n'a pas été réalisée.*

### SECTION 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**  
*H226 Liquide et vapeurs inflammables.*  
*H302 Nocif en cas d'ingestion.*  
*H314 Provoque des brûlures de la peau et des lésions oculaires graves.*  
*H318 Provoque des lésions oculaires graves.*
- **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*  
*Flam. Liq. 3: Flammable liquids, Hazard Category 3*  
*Acute Tox. 4: Acute toxicity, Hazard Category 4*  
*Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A*  
*Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1*



# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 02.06.2015

überarbeitet am: 02.06.2015

### ABSCHNITT 1: Bezeichnung des Stoffs bzw. des Gemischs und des Unternehmens

- **1.1 Produktidentifikator**
- **Handelsname:** GILL'S HEMATOXYLIN 3
- **Artikelnummer:** 26030-30, 15285-03, 26030-34
- **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**



GHS05 Ätzwirkung

Eye Dam. 1 H318 Verursacht schwere Augenschäden.

- **2.2 Kennzeichnungselemente**
- **Kennzeichnung gemäß Verordnung (EG) Nr. 1272/2008**  
Das Produkt ist gemäß CLP-Verordnung eingestuft und gekennzeichnet.
- **Gefahrenpiktogramme**



GHS05

- **Signalwort** Gefahr
- **Gefahrbestimmende Komponenten zur Etikettierung:**  
Aluminiumsulfat

(Fortsetzung auf Seite 2)

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**Handelsname: GILL'S HEMATOXYLIN 3**

(Fortsetzung von Seite 1)

- **Gefahrenhinweise**  
H318 Verursacht schwere Augenschäden.
- **Sicherheitshinweise**  
P280 Schutzhandschuhe/Schutzkleidung/Augenschutz/Gesichtsschutz tragen.  
P305+P351+P338 BEI KONTAKT MIT DEN AUGEN: Einige Minuten lang behutsam mit Wasser spülen. Vorhandene Kontaktlinsen nach Möglichkeit entfernen. Weiter spülen.  
P310 Sofort GIFTINFORMATIONSZENTRUM/Arzt anrufen.  
P403+P235 Kühl an einem gut belüfteten Ort 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.

### ABSCHNITT 3: Zusammensetzung/Angaben zu Bestandteilen

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

- **Gefährliche Inhaltsstoffe:**

CAS: 107-21-1 EINECS: 203-473-3	Ethandiol	⚠ Acute Tox. 4, H302	25-50%
CAS: 64-19-7 EINECS: 200-580-7	Essigsäure	⚠ Flam. Liq. 3, H226; ⚠ Skin Corr. 1A, H314	2,5-10%
CAS: 10043-01-3 EINECS: 233-135-0	Aluminiumsulfat	⚠ Eye Dam. 1, H318	2,5-10%

### ABSCHNITT 4: Erste-Hilfe-Maßnahmen

- **4.1 Beschreibung der Erste-Hilfe-Maßnahmen**
- **Nach Einatmen:** Frischluftzufuhr, bei Beschwerden Arzt aufsuchen.
- **Nach Hautkontakt:** Im allgemeinen ist das Produkt nicht hautreizend.
- **Nach Augenkontakt:**  
Augen bei geöffnetem Lidspalt mehrere Minuten unter fließendem Wasser abspülen und Arzt konsultieren.
- **Nach Verschlucken:** Bei anhaltenden Beschwerden Arzt konsultieren.
- **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:**  
CO<sub>2</sub>, 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.

(Fortsetzung auf Seite 3)

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- **5.3 Hinweise für die Brandbekämpfung**
- **Besondere Schutzausrüstung:** Keine besonderen Maßnahmen erforderlich.

### ABSCHNITT 6: Maßnahmen bei unbeabsichtigter Freisetzung

- **6.1 Personenbezogene Vorsichtsmaßnahmen, Schutzausrüstungen und in Notfällen anzuwendende Verfahren**  
Nicht erforderlich.
- **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.  
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:** Vor Hitze schützen.
- **7.2 Bedingungen zur sicheren Lagerung unter Berücksichtigung von Unverträglichkeiten**
- **Lagerung:**
- **Anforderung an Lagerräume und Behälter:** Keine besonderen Anforderungen.
- **Zusammenlagerungshinweise:** Nicht erforderlich.
- **Weitere Angaben zu den Lagerbedingungen:** Vor Hitze und direkter Sonnenbestrahlung schützen.
- **Lagerklasse:**
- **Klassifizierung nach Betriebssicherheitsverordnung (BetrSichV):** -
- **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:**

#### 107-21-1 Ethandiol

AGW Langzeitwert: 26 mg/m<sup>3</sup>, 10 ml/m<sup>3</sup>  
2(I);DFG, EU, H, Y, 11

#### 64-19-7 Essigsäure

AGW Langzeitwert: 25 mg/m<sup>3</sup>, 10 ml/m<sup>3</sup>  
2(I);DFG, EU, Y

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

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- **8.2 Begrenzung und Überwachung der Exposition**
- **Persönliche Schutzausrüstung:**
- **Allgemeine Schutz- und Hygienemaßnahmen:**  
*Beschmutzte, getränkte Kleidung sofort ausziehen.  
 Vor den Pausen und bei Arbeitsende Hände waschen.  
 Berührung mit den Augen vermeiden.*
- **Atemschutz:**  
*Bei kurzzeitiger oder geringer Belastung Atemfiltergerät; bei intensiver bzw. längerer Exposition umluftunabhängiges Atemschutzgerät verwenden.*
- **Handschutz:**  
*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.*
- **Augenschutz:**



Dichtschließende Schutzbrille

### ABSCHNITT 9: Physikalische und chemische Eigenschaften

- **9.1 Angaben zu den grundlegenden physikalischen und chemischen Eigenschaften**
- **Allgemeine Angaben**
- **Aussehen:**

<b>Form:</b>	Flüssigkeit
<b>Farbe:</b>	Rot
- **Geruch:** Charakteristisch
- **Geruchsschwelle:** Nicht bestimmt.
- **pH-Wert bei 20 °C:** 5
- **Zustandsänderung**

<b>Schmelzpunkt/Schmelzbereich:</b>	Nicht bestimmt.
<b>Siedepunkt/Siedebereich:</b>	100 °C
- **Flammpunkt:** 93 °C
- **Entzündlichkeit (fest, gasförmig):** Nicht anwendbar.
- **Zündtemperatur:** 410 °C
- **Zersetzungstemperatur:** Nicht bestimmt.
- **Selbstentzündlichkeit:** Das Produkt ist nicht selbstentzündlich.
- **Explosionsgefahr:** Das Produkt ist nicht explosionsgefährlich.

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# Sicherheitsdatenblatt

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· <b>Explosionsgrenzen:</b>	
<b>Untere:</b>	3,2 Vol %
<b>Obere:</b>	53,0 Vol %
· <b>Dampfdruck bei 20 °C:</b>	23 hPa
· <b>Dichte:</b>	Nicht bestimmt.
· <b>Relative Dichte</b>	Nicht bestimmt.
· <b>Dampfdichte</b>	Nicht bestimmt.
· <b>Verdampfungsgeschwindigkeit</b>	Nicht bestimmt.
· <b>Löslichkeit in / Mischbarkeit mit Wasser:</b>	Vollständig mischbar.
· <b>Verteilungskoeffizient (n-Octanol/Wasser):</b>	Nicht bestimmt.
· <b>Viskosität:</b>	
<b>Dynamisch:</b>	Nicht bestimmt.
<b>Kinematisch:</b>	Nicht bestimmt.
· <b>Lösemittelgehalt:</b>	
<b>Organische Lösemittel:</b>	6,0 %
<b>Wasser:</b>	62,5 %
<b>VOC (EU)</b>	6,00 %
· <b>Festkörpergehalt:</b>	5,0 %
· <b>9.2 Sonstige Angaben</b>	Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 10: Stabilität und Reaktivität

- **10.1 Reaktivität**
- **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:**

· <b>Einstufungsrelevante LD/LC50-Werte:</b>		
<b>107-21-1 Ethandiol</b>		
Oral	LD50	5840 mg/kg (rat)
Dermal	LD50	9530 mg/kg (rabbit)

- **Primäre Reizwirkung:**
- **an der Haut:** Keine Reizwirkung.
- **am Auge:** Starke Reizwirkung mit Gefahr ernster Augenschäden.
- **Sensibilisierung:** Keine sensibilisierende Wirkung bekannt.

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**· Zusätzliche toxikologische Hinweise:**

Das Produkt weist aufgrund des Berechnungsverfahrens der Allgemeinen Einstufungsrichtlinie der EG für Zubereitungen in der letztgültigen Fassung folgende Gefahren auf:  
Reizend

### 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:** Giftig für Fische.

· **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.

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

· **14.1 UN-Nummer**

· **ADR, ADN, IATA**

· **IMDG**

entfällt

UN3082

· **14.2 Ordnungsgemäße UN-Versandbezeichnung**

· **ADR, ADN, IATA**

· **IMDG**

entfällt

ENVIRONMENTALLY HAZARDOUS SUBSTANCE,  
LIQUID, N.O.S. (aluminium sulphate), MARINE  
POLLUTANT

(Fortsetzung auf Seite 7)

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### · 14.3 Transportgefahrenklassen

· ADR, ADN, IATA

· Klasse entfällt

### · IMDG

· Class 9 Verschiedene gefährliche Stoffe und Gegenstände· Label 9

### · 14.4 Verpackungsgruppe

· ADR, IATA entfällt· IMDG III

### · 14.5 Umweltgefahren:

Das Produkt enthält umweltgefährdende Stoffe:  
Aluminiumsulfat· Marine pollutant: JaSymbol (Fisch und Baum)

### · 14.6 Besondere Vorsichtsmaßnahmen für den Verwender

Nicht anwendbar.· EMS-Nummer: F-A,S-F

### · 14.7 Massengutbeförderung gemäß Anhang II des MARPOL-Übereinkommens 73/78 und gemäß IBC- Code

Nicht anwendbar.

### · Transport/weitere Angaben:

#### · IMDG

· Limited quantities (LQ) 5L· Excepted quantities (EQ) Code: E1Maximum net quantity per inner packaging: 30 mlMaximum net quantity per outer packaging: 1000 ml

· UN "Model Regulation":

-

## ABSCHNITT 15: Rechtsvorschriften

### · 15.1 Vorschriften zu Sicherheit, Gesundheits- und Umweltschutz/spezifische Rechtsvorschriften für den Stoff oder das Gemisch

#### · Nationale Vorschriften:

· Klassifizierung nach Betriebssicherheitsverordnung (BetrSichV): -

#### · Technische Anleitung Luft:

Klasse	Anteil in %
Wasser	62,5
II	6,0

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

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· **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**

H226 Flüssigkeit und Dampf entzündbar.

H302 Gesundheitsschädlich bei Verschlucken.

H314 Verursacht schwere Verätzungen der Haut und schwere Augenschäden.

H318 Verursacht schwere Augenschäden.

· **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

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

DE



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

Stampato il: 02.06.2015

Revisione: 02.06.2015

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

- **1.1 Identificatore del prodotto**
- **Denominazione commerciale:** GILL'S HEMATOXYLIN 3
- **Articolo numero:** 26030-30, 15285-03, 26030-34
- **1.2 Usi pertinenti identificati della sostanza o 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**



GHS05 corrosione

Eye Dam. 1 H318 Provoca gravi lesioni oculari.

- **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**



GHS05

- **Avvertenza Pericolo**
- **Componenti pericolosi che ne determinano l'etichettatura:**  
solfato di alluminio
- **Indicazioni di pericolo**  
H318 Provoca gravi lesioni oculari.
- **Consigli di prudenza**  
P280 Indossare guanti/indumenti protettivi/Proteggere gli occhi/il viso.

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**Scheda di dati di sicurezza**  
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**P305+P351+P338 IN CASO DI CONTATTO CON GLI OCCHI:** sciacquare accuratamente per parecchi minuti. Togliere le eventuali lenti a contatto se è agevole farlo. Continuare a sciacquare.

**P310** Contattare immediatamente un CENTRO ANTIVELENI/un medico.

**P403+P235** Conservare in luogo fresco e ben ventilato.

**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.

· **Sostanze pericolose:**

CAS: 107-21-1 EINECS: 203-473-3	glicol etilenico ⚠ Acute Tox. 4, H302	25-50%
CAS: 64-19-7 EINECS: 200-580-7	acido acetico ⚠ Flam. Liq. 3, H226; ⚠ Skin Corr. 1A, H314	2,5-10%
CAS: 10043-01-3 EINECS: 233-135-0	solfato di alluminio ⚠ Eye Dam. 1, H318	2,5-10%

**SEZIONE 4: Misure di primo soccorso**

- **4.1 Descrizione delle misure di primo soccorso**
- **Inalazione:** Portare in zona ben areata, in caso di disturbi consultare il medico.
- **Contatto con la pelle:** Generalmente il prodotto non è irritante per la pelle.
- **Contatto con gli occhi:**  
Lavare con acqua corrente per diversi minuti tenendo le palpebre ben aperte e consultare il medico.
- **Ingestione:** Se il dolore persiste consultare il medico.
- **4.2 Principali sintomi ed effetti, sia acuti che ritardati** Non sono disponibili altre informazioni.
- **4.3 Indicazione della 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:**  
CO<sub>2</sub>, 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:** Non sono richiesti provvedimenti particolari.

**SEZIONE 6: Misure in caso di rilascio accidentale**

- **6.1 Precauzioni personali, dispositivi di protezione e procedure in caso di emergenza** Non necessario.

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- **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).  
Provvedere ad una sufficiente areazione.
- **6.4 Riferimento ad altre sezioni**  
Per informazioni relative ad un 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:** Proteggere dal calore.
- **7.2 Condizioni per l'immagazzinamento sicuro, comprese eventuali incompatibilità**
- **Stoccaggio:**
- **Requisiti dei magazzini e dei recipienti:** Non sono richiesti requisiti particolari.
- **Indicazioni sullo stoccaggio misto:** Non necessario.
- **Ulteriori indicazioni relative alle condizioni di immagazzinamento:**  
Proteggere dal calore e dai raggi diretti del sole.
- **7.3 Usi finali specifici** 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:**

#### 107-21-1 glicol etilenico

TWA	Limite Ceiling: 100 mg/m <sup>3</sup> A4 (aerosol)
VL	Valore a breve termine: 104 mg/m <sup>3</sup> , 40 ppm Valore a lungo termine: 52 mg/m <sup>3</sup> , 20 ppm Pelle

#### 64-19-7 acido acetico

TWA	Valore a breve termine: 37 mg/m <sup>3</sup> , 15 ppm Valore a lungo termine: 25 mg/m <sup>3</sup> , 10 ppm
-----	--

- **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:**  
Togliere immediatamente gli abiti contaminati.  
Lavarsi le mani prima dell'intervallo o a lavoro terminato.  
Evitare il contatto con gli occhi.

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IT

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**· Maschera protettiva:**

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

**· 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:** Liquido

**Colore:** Rosso

**· Odore:** Caratteristico

**· Soglia olfattiva:** Non definito.

**· valori di pH a 20 °C:** 5

**· Cambiamento di stato**

**Temperatura di fusione/ambito di fusione:** Non definito.

**Temperatura di ebollizione/ambito di ebollizione:** 100 °C

**· Punto di infiammabilità:** 93 °C

**· Infiammabilità (solido, gassoso):** Non applicabile.

**· Temperatura di accensione:** 410 °C

**· Temperatura di decomposizione:** Non definito.

**· Autoaccensione:** Prodotto non autoinfiammabile.

**· Pericolo di esplosione:** Prodotto non esplosivo.

**· Limiti di infiammabilità:**

**Inferiore:** 3,2 Vol %

**Superiore:** 53,0 Vol %

**· Tensione di vapore a 20 °C:** 23 hPa

**· Densità:** Non definito.

**· Densità relativa** Non definito.

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· <b>Densità del vapore</b>	Non definito.
· <b>Velocità di evaporazione</b>	Non definito.
· <b>Solubilità in/Miscibilità con acqua:</b>	Completamente miscibile.
· <b>Coefficiente di distribuzione (n-Octanol/acqua):</b>	Non definito.
· <b>Viscosità:</b>	
<b>Dinamica:</b>	Non definito.
<b>Cinematica:</b>	Non definito.
· <b>Tenore del solvente:</b>	
<b>Solventi organici:</b>	6,0 %
<b>Acqua:</b>	62,5 %
<b>VOC (CE)</b>	6,00 %
· <b>Contenuto solido:</b>	5,0 %
· <b>9.2 Altre informazioni</b>	Non sono disponibili altre informazioni.

### SEZIONE 10: Stabilità e reattività

- **10.1 Reattività**
- **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.

### SEZIONE 11: Informazioni tossicologiche

- **11.1 Informazioni sugli effetti tossicologici**
- **Tossicità acuta:**

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

#### 107-21-1 glicol etilenico

Orale	LD50	5840 mg/kg (rat)
Cutaneo	LD50	9530 mg/kg (rabbit)

- **Irritabilità primaria:**
- **sulla pelle:** Non ha effetti irritanti.
- **sugli occhi:** Forte irritazione con rischio di gravi lesioni oculari.
- **Sensibilizzazione:** Non si conoscono effetti sensibilizzanti.
- **Ulteriori dati tossicologici:**  
Il prodotto, in base al metodo di calcolo della direttiva generale della Comunità sulla classificazione dei preparati nella sua ultima versione valida, presenta i seguenti rischi:  
Irritante

### SEZIONE 12: Informazioni ecologiche

- **12.1 Tossicità**
- **Tossicità acquatica:** Non sono disponibili altre informazioni.
- **12.2 Persistenza e degradabilità** Non sono disponibili altre informazioni.

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- **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:** 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.

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.

### 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, ADN, IATA**

non applicabile

- **IMDG**

UN3082

- **14.2 Nome di spedizione dell'ONU**

- **ADR, ADN, IATA**

non applicabile

- **IMDG**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (aluminium sulphate), MARINE POLLUTANT

- **14.3 Classi di pericolo connesso al trasporto**

- **ADR, ADN, IATA**

- **Classe**

non applicabile

- **IMDG**



- **Class**

9 Materie ed oggetti pericolosi diversi

- **Label**

9

- **14.4 Gruppo di imballaggio**

- **ADR, IATA**

non applicabile

- **IMDG**

III

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**Scheda di dati di sicurezza**  
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· <b>14.5 Pericoli per l'ambiente:</b>	Il prodotto contiene materie pericolose per l'ambiente: solfato di alluminio
· <b>Marine pollutant:</b>	Sì Simbolo (pesce e albero)
· <b>14.6 Precauzioni speciali per gli utilizzatori</b>	Non applicabile.
· <b>Numero EMS:</b>	F-A,S-F
· <b>14.7 Trasporto di rinfuse secondo l'allegato II di MARPOL 73/78 ed il codice IBC</b>	Non applicabile.
· <b>Trasporto/ulteriori indicazioni:</b>	
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5L
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>UN "Model Regulation":</b>	-

### SEZIONE 15: Informazioni sulla regolamentazione

· **15.1 Norme e legislazione su salute, sicurezza e ambiente specifiche per la sostanza o la miscela**

· **Disposizioni nazionali:**

· **Istruzione tecnica aria:**

Classe	quota in %
NC	6,0

· **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.

· **Fraasi rilevanti**

H226 Liquido e vapori infiammabili.

H302 Nocivo se ingerito.

H314 Provoca gravi ustioni cutanee e gravi lesioni oculari.

H318 Provoca gravi lesioni oculari.

· **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

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

# 안전지침서

## 제31조의 1907/2006/EC에 따라

기압점: 2015.06.02

개정: 2015.06.02

### 1 화학제품과 회사에 관한 정보

- **제품 식별자**
- **제품명:** GILL'S HEMATOXYLIN 3
- **상품번호:** 26030-30, 15285-03, 26030-34
- **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**
- **제조자/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**



부식

심한 눈 손상/자극성 구분1 H318 눈에 심한 손상을 일으킴



환경

수생환경유해성-만성 구분2 H411 장기적인 영향에 의해 수생생물에게 유독함

- **라벨표기 요소**
- **GHS 라벨 요소**  
 본 제품은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.
- **그림문자**



GHS05 GHS09

- **신호어 위험**
- **상표상에명확히위험성이표시된성분:**  
 aluminium sulphate

(2 쪽에계속)



# 안전지침서

## 제31조의 1907/2006/EC에 따라

기압점: 2015.06.02

개정: 2015.06.02

**제품명: GILL'S HEMATOXYLIN 3**

(1 쪽부터계속)

- **유해.위험 문구**  
 눈에 심한 손상을 일으킴  
 장기적인 영향에 의해 수생생물에게 유독함
- **예방조치 문구**  
 (보호장갑·보호의·보안경·안면보호구)를(을) 착용 하시오.  
 환경으로 배출하지 마시오.  
 눈에 묻으면 몇 분간 물로 조심해서 씻으시오. 가능하면콘택트렌즈를 제거 하시오. 계속 씻으시오.  
 즉시 독성물질센터/병원 연락 필요.  
 누출물을 모으시오.  
 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 첨가물이 함유된 아래에 열거된 물질로 만들어진 혼합물.

· **위험요소:**

107-21-1	ethanediol ⚠ 급성 독성(경구) 구분4, H302	25-50%
64-19-7	Acetic Acid Glacial ⚠ 인화성 액체 구분3, H226; ⚠ 피부 부식성/자극성 구분1, H314	2.5-10%
10043-01-3	aluminium sulphate ⚠ 심한 눈 손상/자극성 구분1, H318; ⚠ 수생환경유해성-급성 구분1, H400; 수생환경유해성-만성 구분1, H410	2.5-10%

### 4 응급조치 요령

- **응급조치요령 내용**
- **흡입했을 때:** 신선한 공기를 쉼, 통증이 있을 때는 의료진의 도움을 구한다.
- **피부에 접촉했을 때:** 일반적으로 이제품은 피부에 자극적이지 않다.
- **눈에 들어갔을 때:** 흐르는 물에 눈을 몇분동안 씻어내고나서, 의사와 상담한다.
- **먹었을 때:** 증상이 지속될 경우에는 의사와 상담한다.
- **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:**  
 이산화탄소, 진화용 석회 가루 또는 물방사를 사용하고, 더 큰 화재는 물을 분사하거나 알코올이 함유된 거품으로 끈다.
- **본 화학물질이나 혼합물에서 발생하는 특별 유해성** 추가적인 정보가 존재하지 않습니다.
- **소방관에 대한 권고사항**
- **화재 진압 시 착용할 보호구 및 예방조치:** 특별한 조치가 필요없음.

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(3 쪽에계속)

# 안전지침서

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### 6 누출 사고 시 대처방법

- 개인적 예방조치, 보호장비 및 응급처치 절차 필요없음.
- **환경 관련 예방조치:**  
하천이나 하수도로 유입되었을 경우 해당 관청에 보고한다.  
많은 물로 희석 시킨다.  
하수도망/해수면위의 물/지하수로 도달하지 않게 한다.
- **밀폐 및 정화 방법과 소재:**  
액체가 혼합된 물질 (모래, 규조토, 산성 결합물, 일반 결합물, 톱밥)에 흡입되도록 한다.  
충분한 환기가 되도록 한다.
- **타 섹션 참조**  
안전 관리에 대한 정보는 제7 장을 참고하십시오.  
개인 보호 장비에 대한 정보는 제8 장을 참고하십시오.  
쓰레기 처리에 대한 정보는 제13 장을 참고하십시오.

### 7 취급 및 저장방법

- **안전 취급을 위한 예방조치**  
작업장에서는 통풍이 잘 되고 습기 제거가 잘 되게 주의한다.  
연무질이 형성되는 것을 피한다.
- **화재 및 폭발 사고 예방대책에 관한 정보:** 열로부터 보호한다.
- **혼합 위험성 등 안전 저장 조건**
- **보관:**  
안전한 저장 방법: 특별한 요구사항이 없음.  
하나의 공동 보관 시설에 대한 보관 관련 정보: 필요 없음  
보관 조건에 관한 추가적인 정보: 열이나 직사광선으로부터 보호한다.  
구체적 최종 사용자 추가적인 정보가 존재하지 않습니다.

### 8 노출방지 및 개인보호구

- **첨단시설 디자인에 대한 추가정보:** 더 이상 의 자료는 없음. 항목 7을 참고하십시오.
- 통제 변수

· **화학물질의 노출기준, 생물학적 노출기준 등:**

107-21-1 ethanediol	
TLV (ROK)	최고노출기준: 100 mg/m <sup>3</sup> , 40 ppm
IOELV (EU)	단기간의 값: 104 mg/m <sup>3</sup> , 40 ppm 장기간의 값: 52 mg/m <sup>3</sup> , 20 ppm Skin
TLV (USA)	장기간의 값: NIC-10* mg/m <sup>3</sup> 최고노출기준: (100) mg/m <sup>3</sup> (H); *as inhalable fraction and vapor
64-19-7 Acetic Acid Glacial	
TLV (ROK)	단기간의 값: 37 mg/m <sup>3</sup> , 15 ppm 장기간의 값: 25 mg/m <sup>3</sup> , 10 ppm
IOELV (EU)	장기간의 값: 25 mg/m <sup>3</sup> , 10 ppm
PEL (USA)	장기간의 값: 25 mg/m <sup>3</sup> , 10 ppm

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REL (USA)	단기간의값: 37 mg/m <sup>3</sup> , 15 ppm 장기간의값: 25 mg/m <sup>3</sup> , 10 ppm
TLV (USA)	단기간의값: 37 mg/m <sup>3</sup> , 15 ppm 장기간의값: 25 mg/m <sup>3</sup> , 10 ppm
<b>10043-01-3 aluminium sulphate</b>	
TLV (ROK)	장기간의값: 2 mg/m <sup>3</sup> as Al
REL (USA)	장기간의값: 2 mg/m <sup>3</sup> as Al
TLV (USA)	장기간의값: 1* mg/m <sup>3</sup> as Al;*as respirable fraction

· **추가 정보:** 제 조 할 당 시 에 유 효 한 목 록 을 기 초 로 사 용 했 다.

· **노출 통제**

· **개인 보호구**

· **일반적보호조치및위생조치:**

더러워지거나음료수가묻은옷은즉시탈의한다.

휴식전이나작업이끝날때마다손을씻는다.

눈과의접촉을피한다.

· **호흡기 보호:**

단시간또는경미한오염의경우에는호흡여과기를사용한다.심각한또는장기간노출시에는호흡보호장비를사용한다.

· **손 보호:**

장갑재질은제품/원료/조제를투과시키지않아야하고,내구성이있어야한다.

테스트를하지않았기때문에제품/조제/화학혼합물에적합한장갑재질에대한추천이없다.

투과시간,침투율과저하를고려해서장갑재료를선택한다.

· **장갑의재료**

적합한장갑의선정은재질차이뿐아니라품질기준의차이도고려하여이루어져야하고제조업종에따라서도다르게선정되어야한다.제품은다양한재료로부터의조제로이루어지는것이기때문에,장갑재질의안정성은사전예측되어질수있는것이아니고,반드시사용전에(그안전성이)체크되어야한다.

· **장갑재료의투과시간** 정확한관통시간은보호장갑제조자에의하여인지되고, 준수되어야한다.

· **눈 보호:**



팍조이는보안경

### 9 물리화학적 특성

· **기본 물리 및 화학적 특성에 대한 정보**

· **일반정보**

· **외형**

· 물리적 상태:	액체
· 색:	빨강
· 냄새:	특색있는
· 후각역치	알맞지않다.

· pH 의 경우 20 °C: 5

· **상태변화**

· 녹는점/어는점: 맞지않는

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<b>초기 끓는점과 끓는점 범위:</b>	100 °C
· 인화점:	93 °C
· 인화성(고체, 기체):	해당사항 없음.
· 점화온도:	410 °C
· 분해 온도:	알맞지않다.
· 자기점화:	이제품은자연발화성이없다.
· 폭발위험:	이제품은폭발위험성이없다
· 인화 또는 폭발 범위의 상한/하한	
아래로:	3.2 Vol %
위로:	53.0 Vol %
· 증기압 의경우 20 °C:	23 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:	6.0 %
물:	62.5 %
VOC (EU)	6.00 %
· 고체의 함량:	5.0 %
· 기타 정보	추가적인 정보가 존재하지 않습니다.

### 10 안정성 및 반응성

- 반응성
- 화학적 안정성
- 화학적 안정성 및 유해 반응의 가능성 / 피해야 할 조건: 규정에따라사용할경우해체는없다
- 유해반응 가능성 위험한반응으로는알려지지않았다.
- 피해야 할 조건 추가적인 정보가 존재하지 않습니다.
- 혼합 금지 물질: 추가적인 정보가 존재하지 않습니다.
- 유해분해물질: 위험성있는분해물들은알려지지않았다.

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### 11 독성에 관한 정보

- 독성학적 영향에 대한 정보
- 급성 독성:

· LD/LC50-수치에 따른 분류:

**107-21-1 ethanediol**

구강의	LD50	5840 mg/kg (rat)
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피부의	LD50	9530 mg/kg (rabbit)
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- 일차적 자극 효과:
- 피부 부식성 또는 자극성: 무자극
- 심한 눈 손상 또는 자극성: 심각한안구상처의위험이있는강한자극
- 감각화: 민감한영향이없는것으로알려져있다.
- 추가적인 독성에 관한 정보:  
이제품은유럽공동체의공동분류원칙의합법적인적자에근거하여최근에발효된원고에서아래위험들의사전준비에대하여제시하고있다.  
자극적인

### 12 환경에 미치는 영향

- 독성
- 수생독성: 추가적인 정보가 존재하지 않습니다.
- 지속성 및 분해성 추가적인 정보가 존재하지 않습니다.
- 생물농축 잠재성 추가적인 정보가 존재하지 않습니다.
- 토양내 이동성 추가적인 정보가 존재하지 않습니다.
- 생태독성:
- 의견: 어류에독이됨
- 추가적인 생태학 정보:
- 일반 특징:  
수질오염등급 1 (자체등급분류): 약하게수질오염이된  
희석시키지않은채대량으로지하수나, 하천으로그리고하수도망에도달하지않게한다.  
하천에서는역시물고기나플랑크톤게는독성이있다.  
물속의유기체에독이되는것
- 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.
- 비위생적 포장:
- 권고: 당국의지침에입각한쓰레기처리.
- 추천 세정제: 경우에따라서세제가첨가된물

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### 14 운송에 필요한 정보

<ul style="list-style-type: none"> <li>· 유엔 번호</li> <li>· ADR, ADN, IATA</li> <li>· IMDG</li> </ul>	<p style="text-align: center;">누락되다 UN3082</p>
<ul style="list-style-type: none"> <li>· UN 적정 선적명</li> <li>· ADR, ADN, IATA</li> <li>· IMDG</li> </ul>	<p style="text-align: center;">누락되다 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (aluminium sulphate), MARINE POLLUTANT</p>
<ul style="list-style-type: none"> <li>· 교통 위험 클래스</li> <li>· ADR, ADN, IATA</li> <li>· 등급</li> </ul>	<p style="text-align: center;">누락되다</p>
<ul style="list-style-type: none"> <li>· IMDG</li> </ul> <div style="text-align: center;">  </div>	<p style="text-align: center;">9 여러모로위험한물질과물체 9</p>
<ul style="list-style-type: none"> <li>· 용기등급</li> <li>· ADR, IATA</li> <li>· IMDG</li> </ul>	<p style="text-align: center;">누락되다 III</p>
<ul style="list-style-type: none"> <li>· 환경적 유해물질:</li> <li>· 해양오염물질:</li> </ul>	<p>이물질은환경과 오염물질을함유하고있다: aluminium sulphate 네 심벌 (물고기와 나무)</p>
<ul style="list-style-type: none"> <li>· 이용자 특별 예방조치</li> <li>· EMS-번호:</li> </ul>	<p style="text-align: center;">해당사항 없음. F-A,S-F</p>
<ul style="list-style-type: none"> <li>· MARPOL73/78(선박으로부터의 해양오염방지협약) 부속서2 및 IBC Code(국제선적화물코드)에 따른 벌크(bulk) 운송</li> </ul>	<p style="text-align: center;">해당사항 없음.</p>
<ul style="list-style-type: none"> <li>· 운 송/추가 정보:</li> </ul>	<p style="text-align: center;">-</p>
<ul style="list-style-type: none"> <li>· IMDG</li> <li>· Limited quantities (LQ)</li> <li>· Excepted quantities (EQ)</li> </ul>	<p style="text-align: center;">5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml</p>
<ul style="list-style-type: none"> <li>· UN "모범 규제":</li> </ul>	<p style="text-align: center;">-</p>

### 15 법적 규제현황

· 해당 순물질 또는 혼합물에 대한 안전, 보건 및 환경 규제/법률

· Korean Existing Chemical Inventory		
107-21-1	ethanediol	KE-13169
64-19-7	Acetic Acid Glacial	KE-00013

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10043-01-3	aluminium sulphate	KE-01042
517-28-2	haematoxylin	KE-10609
7681-55-2	Sodium iodate	KE-31509
7732-18-5	water, distilled, conductivity or of similar purity	KE-35400

**· GHS 라벨 요소**

본 제품은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.

**· 위험 도표**



GHS05 GHS09

**· 표지어 위험**

**· 상표상에명확히위험성이표시된성분:**

aluminium sulphate

**· 위험 문구**

눈에 심한 손상을 일으킴  
장기적인 영향에 의해 수생생물에게 유독함

**· 주의 문구**

(보호장갑·보호의·보안경·안면보호구)를(을) 착용 하시오.  
환경으로 배출하지 마시오.  
눈에 묻으면 몇 분간 물로 조심해서 씻으시오. 가능하면콘택트렌즈를 제거 하시오. 계속 씻으시오.  
즉시 독성물질센터/병원 연락 필요.  
누출물을 모으시오.

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:** 2015.06.02

· **개정 횟수 및 최종 개정일자:** 1 / 2015.06.02

**· 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

인화성 액체 구분3: Flammable liquids, Hazard Category 3

급성 독성(경구) 구분4: Acute toxicity, Hazard Category 4

피부 부식성/자극성 구분1: Skin corrosion/irritation, Hazard Category 1

심한 눈 손상/자극성 구분1: Serious eye damage/eye irritation, Hazard Category 1

수생환경유해성-급성 구분1: Hazardous to the aquatic environment - AcuteHazard, Category 1

수생환경유해성-만성 구분1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

수생환경유해성-만성 구분2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

# Ficha de datos de seguridad

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fecha de impresión 02.06.2015

Revisión: 02.06.2015

### SECCIÓN 1: Identificación de la sustancia o la mezcla y de la sociedad o la empresa

- **1.1 Identificador del producto**
- **Nombre comercial:** GILL'S HEMATOXYLIN 3
- **Número del artículo:** 26030-30, 15285-03, 26030-34
- **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**



GHS05 corrosión

Eye Dam. 1 H318 Provoca lesiones oculares graves.

- **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**



GHS05

- **Palabra de advertencia** Peligro
- **Componentes peligrosos a indicar en el etiquetaje:**  
sulfato de aluminio
- **Indicaciones de peligro**  
H318 Provoca lesiones oculares graves.

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### · Consejos de prudencia

- P280 Llevar guantes/prendas/gafas/máscara de protección.  
 P305+P351+P338 **EN CASO DE CONTACTO CON LOS OJOS:** Aclarar cuidadosamente con agua durante varios minutos. Quitar las lentes de contacto, si lleva y resulta fácil. Seguir aclarando.  
 P310 Llamar inmediatamente a un CENTRO DE TOXICOLOGÍA/médico.  
 P403+P235 Almacenar en un lugar bien ventilado. Mantener en lugar fresco.  
 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.

## 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: 107-21-1	etanodiol	25-50%
EINECS: 203-473-3	⚠ Acute Tox. 4, H302	
CAS: 64-19-7	ácido acético	2,5-10%
EINECS: 200-580-7	⚠ Flam. Liq. 3, H226; ⚠ Skin Corr. 1A, H314	
CAS: 10043-01-3	sulfato de aluminio	2,5-10%
EINECS: 233-135-0	⚠ Eye Dam. 1, H318	

## SECCIÓN 4: Primeros auxilios

### · 4.1 Descripción de los primeros auxilios

- **En caso de inhalación del producto:** Suministrar aire fresco. En caso de trastornos, consultar al médico.
- **En caso de contacto con la piel:** Por regla general, el producto no irrita la piel.
- **En caso de con los ojos:**  
Limpiar los ojos abiertos durante varios minutos con agua corriente y consultar un médico.
- **En caso de ingestión:** Consultar un médico si los trastornos persisten.
- **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:

CO<sub>2</sub>, 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

- **5.3 Recomendaciones para el personal de lucha contra incendios**
- **Equipo especial de protección:** No se requieren medidas especiales.

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### SECCIÓN 6: Medidas en caso de vertido accidental

- **6.1 Precauciones personales, equipo de protección y procedimientos de emergencia** No es necesario.
- **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).  
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:** Proteger del calor.
- **7.2 Condiciones de almacenamiento seguro, incluidas posibles incompatibilidades**
- **Almacenamiento:**
- **Exigencias con respecto al almacén y los recipientes:** No se requieren medidas especiales.
- **Normas en caso de un almacenamiento conjunto:** No es necesario.
- **Indicaciones adicionales sobre las condiciones de almacenamiento:**  
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:**

#### 107-21-1 etanodiol

LEP	Valor de corta duración: 104 mg/m <sup>3</sup> , 40 ppm Valor de larga duración: 52 mg/m <sup>3</sup> , 20 ppm vía dérmica, VLI
-----	---

#### 64-19-7 ácido acético

LEP	Valor de corta duración: 37 mg/m <sup>3</sup> , 15 ppm Valor de larga duración: 25 mg/m <sup>3</sup> , 10 ppm
-----	--

#### 10043-01-3 sulfato de aluminio

LEP	Valor de larga duración: 2 mg/m <sup>3</sup> c, como Al
-----	--

- **Indicaciones adicionales:** Como base se han utilizado las listas vigentes en el momento de la elaboración.

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### · 8.2 Controles de la exposición

#### · Equipo de protección individual:

#### · Medidas generales de protección e higiene:

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.

#### · 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:

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: Líquido

Color: Rojo

· Olor: Característico

· Umbral olfativo: No determinado.

· valor pH a 20 °C: 5

#### · Cambio de estado

Punto de fusión /campo de fusión: Indeterminado.

Punto de ebullición /campo de ebullición: 100 °C

· Punto de inflamación: 93 °C

· Inflamabilidad (sólido, gaseiforme): No aplicable.

· Temperatura de ignición: 410 °C

· Temperatura de descomposición: No determinado.

· Autoinflamabilidad: El producto no es autoinflamable.

· Peligro de explosión: El producto no es explosivo.

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· <b>Límites de explosión:</b>	
<b>Inferior:</b>	3,2 Vol %
<b>Superior:</b>	53,0 Vol %
· <b>Presión de vapor a 20 °C:</b>	23 hPa
· <b>Densidad:</b>	Indeterminado.
· <b>Densidad relativa</b>	No determinado.
· <b>Densidad de vapor</b>	No determinado.
· <b>Velocidad de evaporación</b>	No determinado.
· <b>Solubilidad en / miscibilidad con agua:</b>	Completamente mezclable.
· <b>Coefficiente de reparto (n-octanol/agua):</b>	No determinado.
· <b>Viscosidad:</b>	
<b>Dinámica:</b>	No determinado.
<b>Cinemática:</b>	No determinado.
· <b>Concentración del disolvente:</b>	
<b>Disolventes orgánicos:</b>	6,0 %
<b>Agua:</b>	62,5 %
<b>VOC (CE)</b>	6,00 %
<b>Contenido de cuerpos sólidos:</b>	5,0 %
· <b>9.2 Información adicional</b>	No existen más datos relevantes disponibles.

### SECCIÓN 10: Estabilidad y reactividad

- **10.1 Reactividad**
- **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.

### SECCIÓN 11: Información toxicológica

- **11.1 Información sobre los efectos toxicológicos**
- **Toxicidad aguda:**

· <b>Valores LD/LC50 (dosis letal /dosis letal = 50%) relevantes para la clasificación:</b>		
<b>107-21-1 etanodiol</b>		
Oral	LD50	5840 mg/kg (rat)
Dermal	LD50	9530 mg/kg (rabbit)

- **Efecto estimulante primario:**
- **en la piel:** No produce irritaciones.
- **en el ojo:** Produce irritaciones fuertes con el riesgo de perjudicar seriamente los ojos.
- **Sensibilización:** No se conoce ningún efecto sensibilizante.
- **Indicaciones toxicológicas adicionales:**

En conformidad con el procedimiento de cálculo contenido en la última versión de la Normativa General de Clasificación de la CE para Preparados, el producto tiene los siguientes riesgos:

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Irritante

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### 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:** Tóxico para peces.
- **Indicaciones medioambientales adicionales:**
- **Indicaciones generales:**  
 Nivel de riesgo para el agua 1 (autoclasiificación): 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.  
 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.

### 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

- |  |  |
|--|--|
| · <b>14.1 Número UN</b>  |  |
| · <b>ADR, ADN, IATA</b>  | suprimido  |
| · <b>IMDG</b>  | UN3082   |
| · <b>14.2 Designación oficial de transporte de las Naciones Unidas</b> |  |
| · <b>ADR, ADN, IATA</b>  | suprimido  |
| · <b>IMDG</b>  | ENVIRONMENTALLY HAZARDOUS SUBSTANCE,<br>LIQUID, N.O.S. (aluminium sulphate), MARINE<br>POLLUTANT |

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ES

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· **14.3 Clase(s) de peligro para el transporte**

· ADR, ADN, IATA

· Clase

suprimido

· **IMDG**



· Class

9 Materias y objetos peligrosos diversos

· Label

9

· **14.4 Grupo de embalaje**

· ADR, IATA

suprimido

· IMDG

III

· **14.5 Peligros para el medio ambiente:**

El producto contiene materias peligrosas para el medio ambiente: sulfato de aluminio

· Contaminante marino:

Sí

Símbolo (pez y árbol)

· **14.6 Precauciones particulares para los usuarios**

No aplicable.

· Número EMS:

F-A,S-F

· **14.7 Transporte a granel con arreglo al anexo II del Convenio Marpol 73/78 y del Código IBC**

No aplicable.

· **Transporte/datos adicionales:**

· **IMDG**

· Limited quantities (LQ)

5L

· Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· "Reglamentación Modelo" de la UNECE:

-

### SECCIÓN 15: Información reglamentaria

· **15.1 Reglamentación y legislación en materia de seguridad, salud y medio ambiente específicas para la sustancia o la mezcla**

No existen más datos relevantes disponibles.

· **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**

H226 Líquidos y vapores inflamables.

H302 Nocivo en caso de ingestión.

H314 Provoca quemaduras graves en la piel y lesiones oculares graves.

H318 Provoca lesiones oculares graves.

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**· 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*

*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*

*Flam. Liq. 3: Flammable liquids, Hazard Category 3*

*Acute Tox. 4: Acute toxicity, Hazard Category 4*

*Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A*

*Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1*

ES