



according to Regulation (EC) No 1907/2006

# Hematoxylin solution, Gill III

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

#### 1.1. Product identifier

Hematoxylin solution, Gill III

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### Use of the substance/mixture

Use as laboratory reagent

### 1.3. Details of the supplier of the safety data sheet

Company name: Waldeck GmbH & Co KG

Division Chroma Havixbecker Str. 62 D-48161 Münster

Post-office box: 410180

D-48065 Münster

Telephone: +49(0)180/2247662 Telefax: +49(0)180/1247662

Responsible Department: Labor

Mo. - Do.: 08.00 - 17.00 Uhr, Fr.: 08.00 - 15.00 Uhr

**1.4. Emergency telephone** +49(0)180/2247662

number:

Street:

Place:

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

## Regulation (EC) No. 1272/2008

Hazard categories:

Acute toxicity: Acute Tox. 4
Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Hazard Statements: Harmful if swallowed. Causes skin irritation.

Causes serious eye irritation.

## 2.2. Label elements

# Regulation (EC) No. 1272/2008

# Hazard components for labelling

ethanediol, ethylene glycol **Signal word:** Warning

Pictograms:



#### **Hazard statements**

H302 Harmful if swallowed.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.

## **Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 Rinse mouth.

P302+P352 IF ON SKIN: Wash with plenty of water.





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P332+P313 If skin irritation occurs: Get medical advice/attention.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

## 2.3. Other hazards

No information available.

# **SECTION 3: Composition/information on ingredients**

### 3.2. Mixtures

#### Hazardous components

| CAS No    | Chemical name   |              |          |  |  |  |
|-----------|---|--------------|----------|--|--|--|
|           | EC No   | Index No     | REACH No |  |  |  |
|           | Classification according to Regulation (EC) No. 1272/2008 [CLP] |              |          |  |  |  |
| 107-21-1  | ethanediol, ethylene glycol                                     |              |          |  |  |  |
|           | 203-473-3   | 603-027-00-1 |          |  |  |  |
|           | Acute Tox. 4; H302  |              |          |  |  |  |
| 64-19-7   | Acetic acid 98 - 100 %  |              |          |  |  |  |
|           | 200-580-7   |              |          |  |  |  |
|           | Flam. Liq. 3, Met. Corr. 1, Skin Corr. 1A; H226 H290 H314       |              |          |  |  |  |
| 7681-55-2 | Sodium iodate   |              |          |  |  |  |
|           | 231-672-5   |              |          |  |  |  |
|           | Ox. Sol. 2; H272  |              |          |  |  |  |

Full text of H and EUH statements: see section 16.

#### **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

## **General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

#### After inhalation

Provide fresh air.

### After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

### After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

### After ingestion

Rinse mouth immediately and drink plenty of water. Medical treatment necessary.

## 4.2. Most important symptoms and effects, both acute and delayed

No information available.

## 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## **SECTION 5: Firefighting measures**





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## 5.1. Extinguishing media

#### Suitable extinguishing media

Water, Carbon dioxide (CO2), Foam, Extinguishing powder

## 5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Hazardous combustion products

#### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

#### Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

### **SECTION 6: Accidental release measures**

## 6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

#### 6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

### 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

## **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

### Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

# Advice on protection against fire and explosion

No special fire protection measures are necessary.

## 7.2. Conditions for safe storage, including any incompatibilities

### Requirements for storage rooms and vessels

Keep container tightly closed.

## Advice on storage compatibility

No special measures are necessary.

## Further information on storage conditions

storage temperature: at room temperature

## 7.3. Specific end use(s)

Use as laboratory reagent

### **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters





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### **Exposure limits (EH40)**

| CAS No   | Substance               | ppm | mg/m³ | fibres/ml | Category      | Origin |
|----------|-------------------------|-----|-------|-----------|---------------|--------|
| 64-19-7  | Acetic acid             | 10  | 25    |           | TWA (8 h)     | EU     |
|          |                         | 15  | 37    |           | STEL (15 min) | EU     |
| 107-21-1 | Ethane-1,2-diol, vapour | 20  | 52    |           | TWA (8 h)     | WEL    |
|          |                         | 40  | 104   |           | STEL (15 min) | WEL    |

### 8.2. Exposure controls





#### Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

## Eye/face protection

Suitable eye protection: goggles.

#### Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

## Skin protection

Wear suitable protective clothing.

# Respiratory protection

In case of inadequate ventilation wear respiratory protection.

## **SECTION 9: Physical and chemical properties**

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

Physical state: liquid
Colour: red violet
Odour: characteristic

Test method

pH-Value (at 20 °C): ~2.5

Changes in the physical state

Melting point:
Initial boiling point and boiling range:
not determined
Flash point:
not determined

**Flammability** 

Solid: not applicable
Gas: not applicable
Lower explosion limits: not determined
Upper explosion limits: not determined





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**Auto-ignition temperature** 

Solid: not applicable
Gas: not applicable
Decomposition temperature: not determined

**Oxidizing properties** 

Not oxidizing.

Vapour pressure: not determined

Density (at 20 °C): 1,07 g/cm³

Water solubility: easily soluble

(at 25 °C)

Solubility in other solvents

not determined

Partition coefficient: not determined

Vapour density: not determined

Evaporation rate: not determined

9.2. Other information

Solid content: not determined

## **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

## 10.3. Possibility of hazardous reactions

No known hazardous reactions.

### 10.4. Conditions to avoid

Keep away from heat.

## 10.5. Incompatible materials

Violent reaction with: Aluminium, Oxidising agent, strong

## 10.6. Hazardous decomposition products

No known hazardous decomposition products.

# **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

## **ATEmix calculated**

ATE (oral) 1470,6 mg/kg





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## **Acute toxicity**

| CAS No   | Chemical name               |      |             |         |        |  |  |
|----------|-----------------------------|------|-------------|---------|--------|--|--|
|          | Exposure route              | Dose |             | Species | Source |  |  |
| 107-21-1 | ethanediol, ethylene glycol |      |             |         |        |  |  |
|          | oral                        | ATE  | 500 mg/kg   |         |        |  |  |
|          | dermal                      | LD50 | 10600 mg/kg | Rabbit  | GESTIS |  |  |
| 64-19-7  | Acetic acid 98 - 100 %      |      |             |         |        |  |  |
|          | oral                        | LD50 | 3310 mg/kg  | Rat     | GESTIS |  |  |

### Additional information on tests

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP].

## **SECTION 12: Ecological information**

#### 12.1. Toxicity

The product is not: Ecotoxic.

| CAS No    | Chemical name            |      |          |           |  |               |  |
|-----------|--------------------------|------|----------|-----------|--|---------------|--|
|           | Aquatic toxicity         | Dose |          | [h]   [d] | Species                                | Source        |  |
| 64-19-7   | Acetic acid 98 - 100 %   |      |          |           |  |               |  |
|           | Acute crustacea toxicity | EC50 | 65 mg/l  | 48 h      | Daphnia magna                          | Janssen et al |  |
| 7681-55-2 | Sodium iodate            |      |          |           |  |               |  |
|           | Acute fish toxicity      | LC50 | 220 mg/l |           | Oncorhynchus mykiss<br>(Rainbow trout) |               |  |

# 12.2. Persistence and degradability

The product has not been tested.

## 12.3. Bioaccumulative potential

The product has not been tested.

### Partition coefficient n-octanol/water

| CAS No    | Chemical name               | Log Pow |
|-----------|-----------------------------|---------|
| 107-21-1  | ethanediol, ethylene glycol | -1,36   |
| 64-19-7   | Acetic acid 98 - 100 %      | -0,17   |
| 7681-55-2 | Sodium iodate               | -7,18   |

# 12.4. Mobility in soil

The product has not been tested.

### 12.5. Results of PBT and vPvB assessment

The product has not been tested.

## 12.6. Other adverse effects

No information available.

## **Further information**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

## **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

### Advice on disposal

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.





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### Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

### **SECTION 14: Transport information**

#### Land transport (ADR/RID)

14.1. UN number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

### Inland waterways transport (ADN)

14.1. UN number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

### Marine transport (IMDG)

14.1. UN number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

## Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

## 14.6. Special precautions for user

No information available.

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

not applicable

## **SECTION 15: Regulatory information**

## 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

## **EU** regulatory information

Restrictions on use (REACH, annex XVII): Entry 3: ethanediol, ethylene glycol

2010/75/EU (VOC): 2,7 % (28,89 g/l) 2004/42/EC (VOC): 35,7 % (381,99 g/l)

#### **Additional information**

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

## **National regulatory information**





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Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile

work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or

nursing mothers.

Water contaminating class (D): 2 - water contaminating

### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

## **SECTION 16: Other information**

## 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 Harmonized 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 LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

### Relevant H and EUH statements (number and full text)

H226 Flammable liquid and vapour.
H272 May intensify fire; oxidiser.
H290 May be corrosive to metals.
H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

#### **Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)