according to Regulation (EC) No. 1907/2006 (REACH)

# Hematoxylin solution acc. to Delafield 20x conc. for microscopy

article number: CN03 date of compilation: 2021-08-03 Version: 1.0 en

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

#### **Product identifier** 1.1

Identification of the substance Hematoxylin solution acc. to Delafield 20x

conc. for microscopy

Article number CN03

Registration number (REACH) not relevant (mixture)

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

Relevant identified uses: Laboratory chemical

Laboratory and analytical use

Uses advised against: Do not use for products which come into contact

with foodstuffs. Do not use for private purposes

(household).

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

Carl Roth GmbH + Co KG Schoemperlenstr, 3-5 D-76185 Karlsruhe Germany

**Telephone:**+49 (0) 721 - 56 06 0 Telefax: +49 (0) 721 - 56 06 149 e-mail: sicherheit@carlroth.de Website: www.carlroth.de

Competent person responsible for the safety data :Department Health, Safety and Environment

sheet:

e-mail (competent person): sicherheit@carlroth.de

#### 1.4 **Emergency telephone number**

| Name   | Street    | Postal code/city     | Telephone    | Website |
|--|-----------|----------------------|--------------|---------|
| National Poisons Information<br>Service<br>City Hospital | Dudley Rd | B187QH<br>Birmingham | 844 892 0111 |         |

# **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

## Classification according to Regulation (EC) No 1272/2008 (CLP)

| Section | Hazard class                                     | Cat-<br>egory | Hazard class and category | Hazard<br>statement |
|---------|--|---------------|---------------------------|---------------------|
| 2.6     | Flammable liquid                                 | 2             | Flam. Liq. 2              | H225                |
| 3.10    | Acute toxicity (oral)                            | 4             | Acute Tox. 4              | H302                |
| 3.1D    | Acute toxicity (dermal)                          | 4             | Acute Tox. 4              | H312                |
| 3.1I    | Acute toxicity (inhal.)                          | 4             | Acute Tox. 4              | H332                |
| 3.8     | Specific target organ toxicity - single exposure | 1             | STOT SE 1                 | H370                |

United Kingdom (en) Page 1 / 21

according to Regulation (EC) No. 1907/2006 (REACH)



# Hematoxylin solution acc. to Delafield 20x conc. for microscopy

article number: CN03

For full text of abbreviations: see SECTION 16

# The most important adverse physicochemical, human health and environmental effects

Immediate effects can be expected after short-term exposure. The product is combustible and can be ignited by potential ignition sources.

## 2.2 Label elements

# Labelling according to Regulation (EC) No 1272/2008 (CLP)

Signal word Danger

# **Pictograms**

GHS02, GHS07, GHS08







#### **Hazard statements**

H225 Highly flammable liquid and vapour

H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled

H370 Causes damage to organs (eye)

# **Precautionary statements**

## **Precautionary statements - prevention**

P210 Keep away from heat. No smoking

P270 Do not eat, drink or smoke when using this product

P280 Wear protective gloves/protective clothing

# **Precautionary statements - response**

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

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing

Hazardous ingredients for labelling: Methanol

# Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Symbol(s)







H370 Causes damage to organs (eye).

P270 Do not eat, drink or smoke when using this product.

contains: Methanol

#### 2.3 Other hazards

#### Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

United Kingdom (en) Page 2 / 21

according to Regulation (EC) No. 1907/2006 (REACH)



# Hematoxylin solution acc. to Delafield 20x conc. for microscopy

article number: CN03

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

#### 3.1 **Substances**

not relevant (mixture)

#### 3.2 **Mixtures**

# **Description of the mixture**

| Name of sub-<br>stance | Identifier                                 | Wt%       | Classification acc. to<br>GHS                                     | Pictograms | Notes           |
|------------------------|--|-----------|---|------------|-----------------|
| Methanol               | CAS No<br>67-56-1                          | 10 - < 20 | Flam. Liq. 2 / H225<br>Acute Tox. 3 / H301<br>Acute Tox. 3 / H311 |            | GHS-HC<br>IOELV |
|                        | EC No<br>200-659-6                         |           | Acute Tox. 3 / H311<br>Acute Tox. 3 / H331<br>STOT SE 1 / H370    |            |                 |
|                        | Index No<br>603-001-00-X                   |           |   |            |                 |
|                        | REACH Reg. No<br>01-2119433307-<br>44-xxxx |           |   |            |                 |
| Glycerine              | CAS No<br>56-81-5                          | <10       |   |            | IOELV           |
|                        | EC No<br>200-289-5                         |           |   |            |                 |
|                        | REACH Reg. No<br>01-2119471987-<br>18-xxxx |           |   |            |                 |
| 2-Propanol             | CAS No<br>67-63-0                          | 3-<10     | Flam. Liq. 2 / H225<br>Eye Irrit. 2 / H319<br>STOT SE 3 / H336    | <u>(4)</u> | GHS-HC          |
|                        | EC No<br>200-661-7                         |           | 3101 SE 3 / FI330   |            |                 |
|                        | Index No<br>603-117-00-0                   |           |   |            |                 |
|                        | REACH Reg. No<br>01-2119457558-<br>25-xxxx |           |   |            |                 |

# Notes

GHS-HC: Harmonised classification (the classification of the substance corresponds to the entry in the list according to 1272/2008/EC, Annex VI)

IOELV: Substance with a community indicative occupational exposure limit value

| Name of sub-<br>stance | Identifier  | Specific Conc. Limits  | M-Factors | ATE  | Exposure<br>route                         |
|------------------------|---|--|-----------|--|---|
| Methanol               | CAS No<br>67-56-1<br>EC No<br>200-659-6<br>Index No<br>603-001-00-X | STOT SE 1; H370: C ≥ 10 %<br>STOT SE 2; H371: 3 % ≤ C < 10 % | -         | 100 <sup>mg</sup> /kg<br>300 <sup>mg</sup> /kg<br>3 <sup>mg</sup> / <sub>l</sub> /4h | oral<br>dermal<br>inhalation: va-<br>pour |

For full text of abbreviations: see SECTION 16

United Kingdom (en) Page 3 / 21

according to Regulation (EC) No. 1907/2006 (REACH)



# Hematoxylin solution acc. to Delafield 20x conc. for microscopy

article number: CN03

# **SECTION 4: First aid measures**

# 4.1 Description of first aid measures



#### **General notes**

Take off contaminated clothing.

# Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

# Following skin contact

Rinse skin with water/shower. In all cases of doubt, or when symptoms persist, seek medical advice.

# Following eye contact

Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.

## Following ingestion

Rinse mouth with water (only if the person is conscious). Call a doctor.

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

Vomiting, Nausea

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

none

# **SECTION 5: Firefighting measures**

# 5.1 Extinguishing media



# Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings water spray, alcohol resistant foam, dry extinguishing powder, BC-powder, carbon dioxide (CO<sub>2</sub>)

## Unsuitable extinguishing media

water jet

# 5.2 Special hazards arising from the substance or mixture

In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture. Solvent vapours are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapours may form explosive mixtures with air.

## **Hazardous combustion products**

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

United Kingdom (en) Page 4 / 21

according to Regulation (EC) No. 1907/2006 (REACH)

# ROTH

# Hematoxylin solution acc. to Delafield 20x conc. for microscopy

article number: CN03

# 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

# **SECTION 6: Accidental release measures**

# 6.1 Personal precautions, protective equipment and emergency procedures



# For non-emergency personnel

Do not breathe vapour/spray. Avoid contact with skin, eyes and clothes. Avoidance of ignition sources. Provide adequate ventilation.

# 6.2 Environmental precautions

Keep away from drains, surface and ground water. Danger of explosion.

# 6.3 Methods and material for containment and cleaning up

# Advice on how to contain a spill

Covering of drains.

# Advice on how to clean up a spill

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

## Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

#### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

# **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Provision of sufficient ventilation. When not in use, keep containers tightly closed.

# Measures to prevent fire as well as aerosol and dust generation



Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharge. Due to danger of explosion, prevent leakage

of vapours into cellars, flues and ditches.

# Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs. When using do not smoke.

United Kingdom (en) Page 5 / 21

according to Regulation (EC) No. 1907/2006 (REACH)

# Hematoxylin solution acc. to Delafield 20x conc. for microscopy

article number: CN03

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

Keep container tightly closed.

# **Incompatible substances or mixtures**

Observe hints for combined storage.

## Consideration of other advice:

Keep container tightly closed.

# **Ventilation requirements**

Keep any substance that emits harmful vapours or gases in a place that allows these to be permanently extracted. Use local and general ventilation.

# Specific designs for storage rooms or vessels

Recommended storage temperature: 15 – 25 °C

#### 7.3 Specific end use(s)

No information available.

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

#### 8.1 **Control parameters**

#### **National limit values**

# **Occupational exposure limit values (Workplace Exposure Limits)**

| Cou<br>ntr<br>y | Name of agent | CAS No  | Identi-<br>fier | TW<br>A<br>[pp<br>m] | TWA<br>[mg/<br>m³] | STE<br>L<br>[pp<br>m] | STEL<br>[mg/<br>m³] | Ceil<br>ing-<br>C<br>[pp<br>m] | Ceil-<br>ing-C<br>[mg/<br>m³] | Nota-<br>tion | Source         |
|-----------------|---------------|---------|-----------------|----------------------|--------------------|-----------------------|---------------------|--------------------------------|-------------------------------|---------------|----------------|
| EU              | methanol      | 67-56-1 | IOELV           | 200                  | 260                |                       |                     |                                |                               |               | 2006/15/<br>EC |
| GB              | glycerol      | 56-81-5 | WEL             |                      | 10                 |                       |                     |                                |                               | mist          | EH40/<br>2005  |
| GB              | methanol      | 67-56-1 | WEL             | 200                  | 266                | 250                   | 333                 |                                |                               |               | EH40/<br>2005  |
| GB              | propan-2-ol   | 67-63-0 | WEL             | 400                  | 999                | 500                   | 1.250               |                                |                               |               | EH40/<br>2005  |

# Notation

Ceiling-C Ceiling value is a limit value above which exposure should not occur

As mists
Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15mist STEL

minute period (unless otherwise specified)
Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified) **TWA** 

| Relevant DNELs         | Relevant DNELs of components of the mixture |               |                     |  |                   |                               |  |  |  |  |  |  |
|------------------------|---|---------------|---------------------|--|-------------------|-------------------------------|--|--|--|--|--|--|
| Name of sub-<br>stance | CAS No                                      | End-<br>point | Threshol<br>d level | Protection<br>goal, route of<br>exposure | Used in           | Exposure time                 |  |  |  |  |  |  |
| Methanol               | 67-56-1                                     | DNEL          | 130 mg/m³           | human, inhalat-<br>ory                   | worker (industry) | chronic - systemic<br>effects |  |  |  |  |  |  |
| Methanol               | 67-56-1                                     | DNEL          | 130 mg/m³           | human, inhalat-<br>ory                   | worker (industry) | acute - systemic<br>effects   |  |  |  |  |  |  |

United Kingdom (en) Page 6 / 21

according to Regulation (EC) No. 1907/2006 (REACH)



fects

fects

effects

acute - systemic

effects

chronic - systemic effects

chronic - systemic

effects

chronic - local ef-

fects

# Hematoxylin solution acc. to Delafield 20x conc. for microscopy

article number: CN03

Methanol

2-Propanol

2-Propanol

Glycerine

#### Relevant DNELs of components of the mixture Name of sub-**CAS No** End-**Threshol Protection Used** in **Exposure time** goal, route of exposure d level stance point human, inhalat-Methanol chronic - local ef-67-56-1 **DNEL** 130 mg/m<sup>3</sup> worker (industry) ory acute - local ef-Methanol 67-56-1 DNEL 130 mg/m<sup>3</sup> human, inhalatworker (industry) ory 20 mg/kg bw/day chronic - systemic Methanol 67-56-1 DNEL human, dermal worker (industry)

20 mg/kg

bw/day

500 mg/m<sup>3</sup>

888 mg/kg

bw/day

56 mg/m<sup>3</sup>

human, dermal

human, inhalat-

human, dermal

human, inhalat-

ory

worker (industry)

worker (industry)

worker (industry)

worker (industry)

# Relevant PNECs of components of the mixture

67-56-1

67-63-0

67-63-0

56-81-5

DNEL

DNEL

**DNEL** 

DNEL

|                        | •       |               |                                    |                            |                                 |                                 |
|------------------------|---------|---------------|------------------------------------|----------------------------|---------------------------------|---------------------------------|
| Name of sub-<br>stance | CAS No  | End-<br>point | Threshol<br>d level                | Organism                   | Environmental compartment       | Exposure time                   |
| Methanol               | 67-56-1 | PNEC          | 20,8 <sup>mg</sup> / <sub>l</sub>  | aquatic organ-<br>isms     | freshwater                      | short-term (single<br>instance) |
| Methanol               | 67-56-1 | PNEC          | 2,08 <sup>mg</sup> / <sub>l</sub>  | aquatic organ-<br>isms     | marine water                    | short-term (single<br>instance) |
| Methanol               | 67-56-1 | PNEC          | 100 <sup>mg</sup> / <sub>l</sub>   | aquatic organ-<br>isms     | sewage treatment<br>plant (STP) | short-term (single<br>instance) |
| Methanol               | 67-56-1 | PNEC          | 77 <sup>mg</sup> / <sub>kg</sub>   | aquatic organ-<br>isms     | freshwater sedi-<br>ment        | short-term (single instance)    |
| Methanol               | 67-56-1 | PNEC          | 7,7 <sup>mg</sup> / <sub>kg</sub>  | aquatic organ-<br>isms     | marine sediment                 | short-term (single<br>instance) |
| Methanol               | 67-56-1 | PNEC          | 100 <sup>mg</sup> / <sub>kg</sub>  | terrestrial organ-<br>isms | soil                            | short-term (single<br>instance) |
| 2-Propanol             | 67-63-0 | PNEC          | 140,9 <sup>mg</sup> / <sub>l</sub> | aquatic organ-<br>isms     | freshwater                      | short-term (single<br>instance) |
| 2-Propanol             | 67-63-0 | PNEC          | 140,9 <sup>mg</sup> / <sub>l</sub> | aquatic organ-<br>isms     | marine water                    | short-term (single<br>instance) |
| 2-Propanol             | 67-63-0 | PNEC          | 2.251 <sup>mg</sup> / <sub>l</sub> | aquatic organ-<br>isms     | sewage treatment<br>plant (STP) | short-term (single<br>instance) |
| 2-Propanol             | 67-63-0 | PNEC          | 552 <sup>mg</sup> / <sub>kg</sub>  | aquatic organ-<br>isms     | freshwater sedi-<br>ment        | short-term (single<br>instance) |
| 2-Propanol             | 67-63-0 | PNEC          | 552 <sup>mg</sup> / <sub>kg</sub>  | aquatic organ-<br>isms     | marine sediment                 | short-term (single<br>instance) |
| 2-Propanol             | 67-63-0 | PNEC          | 28 <sup>mg</sup> / <sub>kg</sub>   | terrestrial organ-<br>isms | soil                            | short-term (single<br>instance) |
| Glycerine              | 56-81-5 | PNEC          | 8,85 <sup>mg</sup> / <sub>l</sub>  | aquatic organ-<br>isms     | water                           | intermittent re-<br>lease       |

United Kingdom (en) Page 7 / 21

according to Regulation (EC) No. 1907/2006 (REACH)



# Hematoxylin solution acc. to Delafield 20x conc. for microscopy

article number: CN03

# Relevant PNECs of components of the mixture

| Name of sub-<br>stance | CAS No  | End-<br>point | Threshol<br>d level                | Organism                   | Environmental compartment       | Exposure time                   |
|------------------------|---------|---------------|------------------------------------|----------------------------|---------------------------------|---------------------------------|
| Glycerine              | 56-81-5 | PNEC          | 0,885 <sup>mg</sup> / <sub>l</sub> | aquatic organ-<br>isms     | freshwater                      | short-term (single<br>instance) |
| Glycerine              | 56-81-5 | PNEC          | 0,088 <sup>mg</sup> / <sub>l</sub> | aquatic organ-<br>isms     | marine water                    | short-term (single<br>instance) |
| Glycerine              | 56-81-5 | PNEC          | 1.000 <sup>mg</sup> / <sub>l</sub> | aquatic organ-<br>isms     | sewage treatment<br>plant (STP) | short-term (single<br>instance) |
| Glycerine              | 56-81-5 | PNEC          | 3,3 <sup>mg</sup> / <sub>kg</sub>  | aquatic organ-<br>isms     | freshwater sedi-<br>ment        | short-term (single<br>instance) |
| Glycerine              | 56-81-5 | PNEC          | 0,33 <sup>mg</sup> / <sub>kg</sub> | aquatic organ-<br>isms     | marine sediment                 | short-term (single<br>instance) |
| Glycerine              | 56-81-5 | PNEC          | 0,141 <sup>mg</sup> /<br>kg        | terrestrial organ-<br>isms | soil                            | short-term (single<br>instance) |

## 8.2 Exposure controls

Individual protection measures (personal protective equipment)

# **Eye/face protection**





Use safety goggle with side protection.

#### Skin protection





# hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. 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. The times are approximate values from measurements at 22 °C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

# type of material

Butyl caoutchouc (butyl rubber)

material thickness

0.7mm

breakthrough times of the glove material

>480 minutes (permeation: level 6)

United Kingdom (en) Page 8 / 21

according to Regulation (EC) No. 1907/2006 (REACH)

# ROTH

# Hematoxylin solution acc. to Delafield 20x conc. for microscopy

article number: CN03

# other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Flame-retardant protective clothing.

# **Respiratory protection**





Respiratory protection necessary at: Aerosol or mist formation.

# **Environmental exposure controls**

Keep away from drains, surface and ground water.

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

# 9.1 Information on basic physical and chemical properties

Physical state liquid

Colour red brown

Odour characteristic

Melting point/freezing point not determined

Boiling point or initial boiling point and boiling >65 °C

range

Flammability flammable liquid in accordance with GHS criteria

Lower and upper explosion limit not determined

Flash point 12 °C (Methanol)

Auto-ignition temperature not determined

Decomposition temperature not relevant

pH (value) not determined

Kinematic viscosity not determined

Solubility(ies)

Water solubility miscible in any proportion

Partition coefficient

Partition coefficient n-octanol/water (log value): this information is not available

Vapour pressure not determined

Density  $\sim 1 \, {\rm g}/{\rm cm}^3$  at 20 °C

Relative vapour density information on this property is not available

United Kingdom (en) Page 9 / 21

according to Regulation (EC) No. 1907/2006 (REACH)



# Hematoxylin solution acc. to Delafield 20x conc. for microscopy

article number: CN03

Particle characteristics not relevant (liquid)

Other safety parameters

Oxidising properties none

9.2 Other information

Information with regard to physical hazard

classes:

Flammable liquids

Sustained combustibility yes, sustained combustion was observed

Other safety characteristics:

Miscibility completely miscible with water

# **SECTION 10: Stability and reactivity**

## 10.1 Reactivity

The mixture contains reactive substance(s). Risk of ignition. Vapours may form explosive mixtures with air.

#### If heated

Risk of ignition.

## 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 Possibility of hazardous reactions

Violent reaction with: strong oxidiser, Alkaline earth metal, Acids, Hydrogen peroxide

## 10.4 Conditions to avoid

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

#### 10.5 Incompatible materials

different, plastics

## 10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

# **SECTION 11: Toxicological information**

## 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Test data are not available for the complete mixture.

## **Classification procedure**

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

## Classification according to GHS (1272/2008/EC, CLP)

# **Acute toxicity**

Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled.

United Kingdom (en) Page 10 / 21

according to Regulation (EC) No. 1907/2006 (REACH)



# Hematoxylin solution acc. to Delafield 20x conc. for microscopy

article number: CN03

# Acute toxicity estimate (ATE) of components of the mixture

| Name of substance | CAS No  | Exposure route     | ATE                                |
|-------------------|---------|--------------------|------------------------------------|
| Methanol          | 67-56-1 | oral               | 100 <sup>mg</sup> / <sub>kg</sub>  |
| Methanol          | 67-56-1 | dermal             | 300 <sup>mg</sup> / <sub>kg</sub>  |
| Methanol          | 67-56-1 | inhalation: vapour | 3 <sup>mg</sup> / <sub>l</sub> /4h |

# Acute toxicity of components of the mixture

| Name of substance | CAS No  | Exposure route          | Endpoint | Value                                 | Species |
|-------------------|---------|-------------------------|----------|---------------------------------------|---------|
| Methanol          | 67-56-1 | inhalation: va-<br>pour | LC50     | 131 <sup>mg</sup> / <sub>l</sub> /4h  | rat     |
| Methanol          | 67-56-1 | oral                    | LD50     | 5.628 <sup>mg</sup> / <sub>kg</sub>   | rat     |
| Methanol          | 67-56-1 | oral                    | LDLo     | 143 <sup>mg</sup> / <sub>kg</sub>     | human   |
| Methanol          | 67-56-1 | dermal                  | LD50     | 15.800 <sup>mg</sup> / <sub>kg</sub>  | rabbit  |
| 2-Propanol        | 67-63-0 | inhalation: va-<br>pour | LC50     | 37,5 <sup>mg</sup> / <sub>l</sub> /4h | rat     |
| 2-Propanol        | 67-63-0 | oral                    | LD50     | 5.045 <sup>mg</sup> / <sub>kg</sub>   | rat     |
| 2-Propanol        | 67-63-0 | dermal                  | LD50     | 12.800 <sup>mg</sup> / <sub>kg</sub>  | rabbit  |
| Glycerine         | 56-81-5 | dermal                  | LD50     | >10.000 <sup>mg</sup> / <sub>kg</sub> | rabbit  |
| Glycerine         | 56-81-5 | oral                    | LD50     | 12.600 <sup>mg</sup> / <sub>kg</sub>  | rat     |

## Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

# Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

# Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

# **Germ cell mutagenicity**

Shall not be classified as germ cell mutagenic.

# Carcinogenicity

Shall not be classified as carcinogenic.

# **Reproductive toxicity**

Shall not be classified as a reproductive toxicant.

# Specific target organ toxicity - single exposure

Causes damage to organs (eye).

| Hazard category | Target organ | Exposure route |
|-----------------|--------------|----------------|
| 1               | eye          | if exposed     |

# Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

United Kingdom (en) Page 11 / 21

according to Regulation (EC) No. 1907/2006 (REACH)

# Hematoxylin solution acc. to Delafield 20x conc. for microscopy

article number: CN03

# **Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

# Symptoms related to the physical, chemical and toxicological characteristics

#### If swallowed

vomiting, nausea

# • If in eyes

Data are not available.

#### If inhaled

Data are not available.

## • If on skin

risk of absorption via the skin

#### Other information

none

# 11.2 Endocrine disrupting properties

None of the ingredients are listed.

#### 11.3 Information on other hazards

There is no additional information.

# **SECTION 12: Ecological information**

# 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

# Aquatic toxicity (acute) of components of the mixture

| Name of sub-<br>stance | CAS No  | Endpoint | Value                               | Species                                  | Exposure<br>time |
|------------------------|---------|----------|-------------------------------------|--|------------------|
| Methanol               | 67-56-1 | LC50     | 15.400 <sup>mg</sup> / <sub>l</sub> | fish                                     | 96 h             |
| Methanol               | 67-56-1 | ErC50    | 22.000 <sup>mg</sup> / <sub>l</sub> | algae                                    | 96 h             |
| 2-Propanol             | 67-63-0 | LC50     | 9.640 <sup>mg</sup> / <sub>l</sub>  | Pimephales promelas                      | 96 h             |
| Glycerine              | 56-81-5 | LC50     | 54.000 <sup>mg</sup> / <sub>l</sub> | rainbow trout (Onco-<br>rhynchus mykiss) | 96 h             |

# Aquatic toxicity (chronic) of components of the mixture

| Name of sub-<br>stance | CAS No  | Endpoint | Value                                | Species               | Exposure<br>time |
|------------------------|---------|----------|--------------------------------------|-----------------------|------------------|
| 2-Propanol             | 67-63-0 | LC50     | >10.000 <sup>mg</sup> / <sub>l</sub> | aquatic invertebrates | 24 h             |

# **Biodegradation**

Data are not available.

United Kingdom (en) Page 12 / 21

according to Regulation (EC) No. 1907/2006 (REACH)



# Hematoxylin solution acc. to Delafield 20x conc. for microscopy

article number: CN03

# 12.2 Process of degradability

# Degradability of components of the mixture

| Name of substance | CAS No  | Process               | Degrada-<br>tion rate | Time | Method                                    | Source |
|-------------------|---------|-----------------------|-----------------------|------|---|--------|
| Methanol          | 67-56-1 | biotic/abiotic        | 99 %                  | 30 d |   |        |
| Methanol          | 67-56-1 | oxygen deple-<br>tion | 69 %                  | 5 d  |   | ECHA   |
| 2-Propanol        | 67-63-0 | biotic/abiotic        | 95 %                  | 21 d | modifizierter<br>OECD Screen-<br>ing Test |        |
| 2-Propanol        | 67-63-0 | oxygen deple-<br>tion | 53 %                  | 5 d  |   | ECHA   |
| Glycerine         | 56-81-5 | biotic/abiotic        | 63 %                  | 14 d |   |        |

# 12.3 Bioaccumulative potential

Data are not available.

# Bioaccumulative potential of components of the mixture

| Name of substance | CAS No  | BCF | Log KOW                      | BOD5/COD |
|-------------------|---------|-----|------------------------------|----------|
| Methanol          | 67-56-1 |     | -0,77                        |          |
| 2-Propanol        | 67-63-0 |     | 0,05                         |          |
| Glycerine         | 56-81-5 |     | -1,75 (pH value: 7,4, 25 °C) |          |

# 12.4 Mobility in soil

Data are not available.

## 12.5 Results of PBT and vPvB assessment

Data are not available.

# 12.6 Endocrine disrupting properties

None of the ingredients are listed.

## 12.7 Other adverse effects

Data are not available.

# **SECTION 13: Disposal considerations**

# 13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

# Sewage disposal-relevant information

Do not empty into drains.

# Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used.

United Kingdom (en) Page 13 / 21

according to Regulation (EC) No. 1907/2006 (REACH)

# ROTH

# Hematoxylin solution acc. to Delafield 20x conc. for microscopy

article number: CN03

# 13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Waste catalogue ordinance (Germany).

#### 13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

# **SECTION 14: Transport information**

# 14.1 UN number or ID number

ADR/RID/ADN UN 1992 IMDG-Code UN 1992 ICAO-TI UN 1992

# 14.2 UN proper shipping name

ADR/RID/ADN FLAMMABLE LIQUID, TOXIC, N.O.S. IMDG-Code FLAMMABLE LIQUID, TOXIC, N.O.S.

ICAO-TI Flammable liquid, toxic, n.o.s.

Technical name (hazardous ingredients) Methanol, 2-Propanol

# 14.3 Transport hazard class(es)

ADR/RID/ADN 3 (6.1)
IMDG-Code 3 (6.1)
ICAO-TI 3 (6.1)

# 14.4 Packing group

ADR/RID/ADN II
IMDG-Code II
ICAO-TI II

# **14.5 Environmental hazards** non-environmentally hazardous acc. to the dan-

gerous goods regulations

# 14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

# 14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

## 14.8 Information for each of the UN Model Regulations

# Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - Additional information

Proper shipping name FLAMMABLE LIQUID, TOXIC, N.O.S.

Particulars in the transport document UN1992, FLAMMABLE LIQUID, TOXIC, N.O.S.,

(contains: Methanol, 2-Propanol), 3 (6.1), II, (D/E)

Classification code FT1

Danger label(s) 3+6.1

United Kingdom (en) Page 14 / 21

according to Regulation (EC) No. 1907/2006 (REACH)



# Hematoxylin solution acc. to Delafield 20x conc. for microscopy

article number: CN03





Special provisions (SP) 274, 802(ADN)

Excepted quantities (EQ) E2
Limited quantities (LQ) 1 L
Transport category (TC) 2
Tunnel restriction code (TRC) D/E
Hazard identification No 336
Emergency Action Code 3WE

# International Maritime Dangerous Goods Code (IMDG) - Additional information

Proper shipping name FLAMMABLE LIQUID, TOXIC, N.O.S.

Particulars in the shipper's declaration UN1992, FLAMMABLE LIQUID, TOXIC, N.O.S.,

UN1992, FLAMMABLE LIQUID, TOXIC, N.O.S., (contains: Methanol, 2-Propanol), 3 (6.1), II, 12°C

c.c.

Marine pollutant -

Danger label(s) 3+6.1





Special provisions (SP) 274

Excepted quantities (EQ) E2

Limited quantities (LQ) 1 L

EmS F-E, S-D

Stowage category B

# International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Proper shipping name Flammable liquid, toxic, n.o.s.

Particulars in the shipper's declaration UN1992, Flammable liquid, toxic, n.o.s., (contains:

Methanol, 2-Propanol), 3 (6.1), II

Danger label(s) 3+6.1





Special provisions (SP)

Excepted quantities (EQ)

Limited quantities (LQ)

1 L

United Kingdom (en) Page 15 / 21

according to Regulation (EC) No. 1907/2006 (REACH)



# Hematoxylin solution acc. to Delafield 20x conc. for microscopy

article number: CN03

# SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)

Restrictions according to REACH, Annex XVII

# Dangerous substances with restrictions (REACH, Annex XVII)

| Name of substance                      | Name acc. to inventory   | CAS No  | Restriction | No |
|--|--|---------|-------------|----|
| Hematoxylin solution acc. to Delafield | this product meets the criteria for<br>classification in accordance with Reg-<br>ulation No 1272/2008/EC |         | R3          | 3  |
| Methanol                               | methanol   | 67-56-1 | R69         | 69 |
| Methanol                               | flammable / pyrophoric   |         | R40         | 40 |
| 2-Propanol                             | flammable / pyrophoric   |         | R40         | 40 |

#### Legend

R40

1. Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,

- tricks and jokes,

games for one or more participants, or any article intended to be used as such, even with ornamental aspects,

 Articles not complying with paragraph 1 shall not be placed on the market.
 Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they

can be used as fuel in decorative oil lamps for supply to the general public, and present an aspiration hazard and are labelled with H304.

- 4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation
- 5. Without prejudice to the implementation of other Union provisions relating to the classification, labelling and packaging of substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:
- (a) lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil
- or even sucking the wick of lamps may lead to life-threatening lung damage";
  (b) grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: 'Just a sip of grill lighter fluid may lead to life threatening lung damage';
  (c) lamps oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.';
  1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended

for supply to the general public for entertainment and decorative purposes such as the following: - metallic glitter intended mainly for decoration,

- artificial snow and frost,
- 'whoopee' cushions,
- silly string aerosols,
- imitation excrement.
- horns for parties,
- decorative flakes and foams,
- artificial cobwebs,
- stink bombs
- 2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with:

  (For professional users only.

3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/324/EEC (2).

4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.

Shall not be placed on the market to the general public after 9 May 2019 in windscreen washing or defrosting fluids, in a concentration equal to or greater than 0,6 % by weight. R69

## List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list

None of the ingredients are listed. (Or Concentration of the substance in a mixture: <0.1 % Mass concentration)

Page 16 / 21 United Kingdom (en)

according to Regulation (EC) No. 1907/2006 (REACH)



# Hematoxylin solution acc. to Delafield 20x conc. for microscopy

article number: CN03

#### **Seveso Directive**

| 2012/18/EU (Seveso III) |                                       |   |       |  |
|-------------------------|---------------------------------------|---|-------|--|
| No                      | Dangerous substance/hazard categories | Qualifying quantity (tonnes) for the application of lower and upper-tier requirements | Notes |  |
| 22                      | methanol                              | 500 5.000   |       |  |

# **Deco-Paint Directive**

| VOC content | 19,2 %<br>743,7 <sup>9</sup> / <sub>I</sub> |
|-------------|---|
|-------------|---|

## **Industrial Emissions Directive (IED)**

| VOC content                                 | 19,2 %                            |
|---|-----------------------------------|
| VOC content                                 | 932 <sup>g</sup> / <sub>l</sub>   |
| VOC content<br>Water content was discounted | 743,7 <sup>9</sup> / <sub>I</sub> |

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

none of the ingredients are listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

none of the ingredients are listed

# **Water Framework Directive (WFD)**

#### **List of pollutants (WFD)** Name of substance **CAS No** Listed in **Remarks** Name acc. to inventory Methanol A) Substances and preparations, or the breakdown products of such, which have been proved to possess carcinogenic or mutagenic properties or properties which may affect steroidogenic, thyroid, reproduction or other endocrinerelated functions in or via the aquatic environment 2-Propanol Substances and preparations, or A) the breakdown products of such, which have been proved to possess carcinogenic or mutagenic properties or properties which may affect steroidogenic, thyroid, reproduction or other endocrinerelated functions in or via the

#### Legend

A) Indicative list of the main pollutants

# Regulation on the marketing and use of explosives precursors

none of the ingredients are listed

United Kingdom (en) Page 17 / 21

aquatic environment

according to Regulation (EC) No. 1907/2006 (REACH)



# Hematoxylin solution acc. to Delafield 20x conc. for microscopy

article number: CN03

# **Regulation on drug precursors**

none of the ingredients are listed

# Regulation on substances that deplete the ozone layer (ODS)

none of the ingredients are listed

## Regulation concerning the export and import of hazardous chemicals (PIC)

none of the ingredients are listed

# Regulation on persistent organic pollutants (POP)

none of the ingredients are listed

#### **National inventories**

| Country | Inventory  | Status                         |
|---------|------------|--------------------------------|
| AU      | AICS       | all ingredients are listed     |
| CA      | DSL        | not all ingredients are listed |
| CN      | IECSC      | all ingredients are listed     |
| EU      | ECSI       | all ingredients are listed     |
| EU      | REACH Reg. | all ingredients are listed     |
| JP      | CSCL-ENCS  | not all ingredients are listed |
| JP      | ISHA-ENCS  | not all ingredients are listed |
| KR      | KECI       | all ingredients are listed     |
| MX      | INSQ       | not all ingredients are listed |
| NZ      | NZIoC      | all ingredients are listed     |
| PH      | PICCS      | all ingredients are listed     |
| TR      | CICR       | not all ingredients are listed |
| TW      | TCSI       | all ingredients are listed     |
| US      | TSCA       | not all ingredients are listed |

# Legend

AICS CICR Australian Inventory of Chemical Substances

Chemical Inventory and Control Regulation List of Existing and New Chemical Substances (CSCL-ENCS) CSCL-ENCS DSL ECSI

Domestic Substances List (DSL)
EC Substance Inventory (EINECS, ELINCS, NLP)
Inventory of Existing Chemical Substances Produced or Imported in China National Inventory of Chemical Substances IECSC

ISHA-ENCS Inventory of Existing and New Chemical Substances (ISHA-ENCS)

NECL Korea Existing Chemicals Inventory
NZIOC New Zealand Inventory of Chemicals
PICCS Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg. REACH registered substances

Taiwan Chemical Substance Inventory **Toxic Substance Control Act** 

## 15.2 Chemical Safety Assessment

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

United Kingdom (en) Page 18 / 21

according to Regulation (EC) No. 1907/2006 (REACH)



# Hematoxylin solution acc. to Delafield 20x conc. for microscopy

article number: CN03

# **SECTION 16: Other information**

# **Abbreviations and acronyms**

| Abbr.       | Descriptions of used abbreviations  |  |
|-------------|---|--|
| 2006/15/EC  | Commission Directive establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC                              |  |
| Acute Tox.  | Acute toxicity  |  |
| ADN         | Accord européen relatif au transport international des marchandises dangereuses par voies de naviga-<br>tion intérieures (European Agreement concerning the International Carriage of Dangerous Goods by In-<br>land Waterways) |  |
| ADR         | Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)   |  |
| ADR/RID/ADN | Agreements concerning the International Carriage of Dangerous Goods by Road/Rail/Inland Waterways (ADR/RID/ADN)   |  |
| ATE         | Acute Toxicity Estimate   |  |
| BCF         | Bioconcentration factor   |  |
| BOD         | Biochemical Oxygen Demand   |  |
| CAS         | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)  |  |
| Ceiling-C   | Ceiling value   |  |
| CLP         | Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures  |  |
| COD         | Chemical oxygen demand  |  |
| DGR         | Dangerous Goods Regulations (see IATA/DGR)  |  |
| DNEL        | Derived No-Effect Level   |  |
| EC No       | The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)   |  |
| EH40/2005   | EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-li-<br>cence/)  |  |
| EINECS      | European Inventory of Existing Commercial Chemical Substances   |  |
| ELINCS      | European List of Notified Chemical Substances   |  |
| EmS         | Emergency Schedule  |  |
| ErC50       | ≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control  |  |
| Eye Dam.    | Seriously damaging to the eye   |  |
| Eye Irrit.  | Irritant to the eye   |  |
| Flam. Liq.  | Flammable liquid  |  |
| GHS         | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations   |  |
| IATA        | International Air Transport Association   |  |
| IATA/DGR    | Dangerous Goods Regulations (DGR) for the air transport (IATA)  |  |
| ICAO        | International Civil Aviation Organization   |  |
| ICAO-TI     | Technical instructions for the safe transport of dangerous goods by air   |  |
| IMDG        | International Maritime Dangerous Goods Code   |  |

United Kingdom (en) Page 19 / 21

according to Regulation (EC) No. 1907/2006 (REACH)



# Hematoxylin solution acc. to Delafield 20x conc. for microscopy

article number: CN03

| Abbr.     | Descriptions of used abbreviations   |
|-----------|--|
| IMDG-Code | International Maritime Dangerous Goods Code  |
| index No  | The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008   |
| IOELV     | Indicative occupational exposure limit value   |
| LC50      | Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval                            |
| LD50      | Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval   |
| log KOW   | n-Octanol/water  |
| NLP       | No-Longer Polymer  |
| PBT       | Persistent, Bioaccumulative and Toxic  |
| PNEC      | Predicted No-Effect Concentration  |
| ppm       | Parts per million  |
| REACH     | Registration, Evaluation, Authorisation and Restriction of Chemicals   |
| RID       | Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula-<br>tions concerning the International carriage of Dangerous goods by Rail) |
| STEL      | Short-term exposure limit  |
| STOT SE   | Specific target organ toxicity - single exposure   |
| SVHC      | Substance of Very High Concern   |
| TWA       | Time-weighted average  |
| VOC       | Volatile Organic Compounds   |
| vPvB      | Very Persistent and very Bioaccumulative   |
| WEL       | Workplace exposure limit   |

# Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

## **Classification procedure**

Physical and chemical properties. The classification is based on tested mixture. Health hazards. Environmental hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

# List of relevant phrases (code and full text as stated in chapter 2 and 3)

| Code | Text                                |
|------|-------------------------------------|
| H225 | Highly flammable liquid and vapour. |
| H301 | Toxic if swallowed.                 |
| H302 | Harmful if swallowed.               |
| H311 | Toxic in contact with skin.         |
| H312 | Harmful in contact with skin.       |

United Kingdom (en) Page 20 / 21

according to Regulation (EC) No. 1907/2006 (REACH)



# Hematoxylin solution acc. to Delafield 20x conc. for microscopy

article number: CN03

| Code | Text                               |
|------|------------------------------------|
| H319 | Causes serious eye irritation.     |
| H331 | Toxic if inhaled.                  |
| H332 | Harmful if inhaled.                |
| H336 | May cause drowsiness or dizziness. |
| H370 | Causes damage to organs (eye).     |

# Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

United Kingdom (en) Page 21 / 21