

Safety data sheet Safety data sheet

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



Hematoxylin solution acc. to Harris for microscopy

article number: **X903**
Version: **2.0 en**
Replaces version of: 2019-10-31
Version: (1)

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

1.1 Product identifier

Identification of the substance **Hematoxylin solution acc. to Harris** for microscopy
Article number X903

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 sheet: :Department Health, Safety and Environment

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

1.4 Emergency telephone number

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

This mixture does not meet the criteria for classification.

Supplemental hazard information

| Code | Supplemental hazard information |
|--------|--|
| EUH208 | contains Sodium iodate. May produce an allergic reaction |

2.2 Label elements

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Labelling

Signal word Not required

Not required

Pictograms

Supplemental hazard information

EUH208 Contains Sodium iodate. May produce an allergic reaction.

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.









SECTION 3: Composition/information on ingredients

3.1 Substances

not relevant (mixture)

3.2 Mixtures

Description of the mixture

| Name of substance | Identifier | Wt% | Classification acc. to GHS | Pictograms | Notes |
|-------------------|---|-------|---|--|-------------------------|
| 2-Propanol | CAS No 67-63-0 EC No 200-661-7 | < 5 | Flam. Liq. 2 / H225 Eye Irrit. 2 / H319 STOT SE 3 / H336 |   | GHS-HC |
| Hematoxylin | CAS No 517-28-2 EC No 208-237-3 | < 1 | Eye Irrit. 2 / H319 |  | |
| Acetic acid ... % | CAS No 64-19-7 EC No 200-580-7 | < 1 | Flam. Liq. 3 / H226 Skin Corr. 1A / H314 Eye Dam. 1 / H318 |   | B(a) GHS-HC IOELV |
| Sodium iodate | CAS No 7681-55-2 EC No 231-672-5 | < 0,5 | Ox. Sol. 2 / H272 Acute Tox. 4 / H302 Resp. Sens. 1 / H334 Skin Sens. 1 / H317 |    | |

Notes

B(a): The classification refers to an aqueous solution

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

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| Name of substance | Identifier | Specific Conc. Limits | M-Factors | ATE | Exposure route |
|-------------------|---|--|-----------|-----------|----------------|
| Acetic acid ... % | CAS No 64-19-7 EC No 200-580-7 | Skin Corr. 1A; H314: C ≥ 90 % Skin Corr. 1B; H314: 25 % ≤ C < 90 % Skin Irrit. 2; H315: 10 % ≤ C < 25 % Eye Dam. 1; H318: C ≥ 25 % Eye Irrit. 2; H319: 10 % ≤ C < 25 % | - | - | |
| Sodium iodate | CAS No 7681-55-2 EC No 231-672-5 | - | - | 505 mg/kg | oral |

For full text of abbreviations: see SECTION 16

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. Call a doctor if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Vomiting, Allergic reactions, Irritant effects

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 (CO₂)

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Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Non-combustible.

Hazardous combustion products

In case of fire may be liberated: Carbon monoxide (CO), Sulphur oxides (SO_x)

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

No special measures are necessary.

6.2 Environmental precautions

Keep away from drains, surface and ground water.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

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

No special measures are necessary.

Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Protect against: Direct light irradiation.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice:

Specific designs for storage rooms or vessels

Recommended storage temperature: 15 – 25 °C

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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)

| Country | Name of agent | CAS No | Identifier | TWA [ppm] | TWA [mg/m ³] | STEL [ppm] | STEL [mg/m ³] | Ceiling-C [ppm] | Ceiling-C [mg/m ³] | Notation | Source |
|---------|---------------|---------|------------|-----------|--------------------------|------------|---------------------------|-----------------|--------------------------------|----------|-------------|
| EU | acetic acid | 64-19-7 | IOELV | 10 | 25 | 20 | 50 | | | | 2017/164/EU |
| GB | acetic acid | 64-19-7 | WEL | 10 | 25 | 20 | 50 | | | | EH40/2005 |
| GB | propan-2-ol | 67-63-0 | WEL | 400 | 999 | 500 | 1.250 | | | | EH40/2005 |

Notation

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

STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA 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)

| Relevant DNELs of components of the mixture | | | | | | |
|---|---------|-----------|-----------------------|------------------------------------|-------------------|----------------------------|
| Name of substance | CAS No | End-point | Threshold level | Protection goal, route of exposure | Used in | Exposure time |
| 2-Propanol | 67-63-0 | DNEL | 500 mg/m ³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| 2-Propanol | 67-63-0 | DNEL | 888 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |

| Relevant PNECs of components of the mixture | | | | | | |
|---|---------|-----------|-----------------|-----------------------|------------------------------|------------------------------|
| Name of substance | CAS No | End-point | Threshold level | Organism | Environmental compartment | Exposure time |
| 2-Propanol | 67-63-0 | PNEC | 140,9 mg/l | aquatic organisms | freshwater | short-term (single instance) |
| 2-Propanol | 67-63-0 | PNEC | 140,9 mg/l | aquatic organisms | marine water | short-term (single instance) |
| 2-Propanol | 67-63-0 | PNEC | 2.251 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| 2-Propanol | 67-63-0 | PNEC | 552 mg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| 2-Propanol | 67-63-0 | PNEC | 552 mg/kg | aquatic organisms | marine sediment | short-term (single instance) |
| 2-Propanol | 67-63-0 | PNEC | 28 mg/kg | terrestrial organisms | soil | short-term (single instance) |

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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. 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**

NBR (Nitrile rubber)

- **material thickness**

>0,11 mm

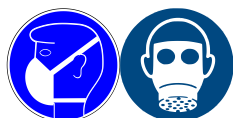
- **breakthrough times of the glove material**

>480 minutes (permeation: level 6)

- **other protection measures**

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

Respiratory protection



Respiratory protection necessary at: Aerosol or mist formation.

Environmental exposure controls

Keep away from drains, surface and ground water.

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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 range | ~ 100 °C |
| Flammability | non-combustible |
| Lower and upper explosion limit | not determined |
| Flash point | not determined |
| Auto-ignition temperature | not determined |
| Decomposition temperature | not relevant |
| pH (value) | ~ 5 |
| Kinematic viscosity | not determined |
| <u>Solubility(ies)</u> | |
| Water solubility | miscible in any proportion |
| <u>Partition coefficient</u> | |
| Partition coefficient n-octanol/water (log value): | not relevant (inorganic) |
| Vapour pressure | 23 hPa at 20 °C |
| <u>Density and/or relative density</u> | |
| Density | ~ 1,03 g/cm ³ |
| Relative vapour density | information on this property is not available |
| Particle characteristics | not relevant (liquid) |
| <u>Other safety parameters</u> | |
| Oxidising properties | none |
| 9.2 Other information | |
| Information with regard to physical hazard classes: | hazard classes acc. to GHS (physical hazards): not relevant |
| Other safety characteristics: | |
| Miscibility | completely miscible with water |

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SECTION 10: Stability and reactivity

10.1 Reactivity

This material is not reactive under normal ambient conditions.

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

10.4 Conditions to avoid

Direct light irradiation.

10.5 Incompatible materials

There is no additional information.

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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 acc. to GHS

This mixture does not meet the criteria for classification.

Acute toxicity

Shall not be classified as acutely toxic.

| Acute toxicity estimate (ATE) of components of the mixture | | | |
|--|-----------|----------------|-----------|
| Name of substance | CAS No | Exposure route | ATE |
| Sodium iodate | 7681-55-2 | oral | 505 mg/kg |

| Acute toxicity of components of the mixture | | | | | |
|---|-----------|--------------------|----------|--------------|---------|
| Name of substance | CAS No | Exposure route | Endpoint | Value | Species |
| 2-Propanol | 67-63-0 | inhalation: vapour | LC50 | 37,5 mg/l/4h | rat |
| 2-Propanol | 67-63-0 | oral | LD50 | 5.045 mg/kg | rat |
| 2-Propanol | 67-63-0 | dermal | LD50 | 12.800 mg/kg | rabbit |
| Hematoxylin | 517-28-2 | oral | LD50 | ≥2.000 mg/kg | rat |
| Acetic acid ... % | 64-19-7 | oral | LD50 | 3.310 mg/kg | rat |
| Sodium iodate | 7681-55-2 | oral | LD50 | 505 mg/kg | mouse |

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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

Contains Sodium iodate. May produce an allergic reaction.

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

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

Specific target organ toxicity - repeated exposure

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

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

• If swallowed

Data are not available.

• If in eyes

causes slight to moderate irritation

• If inhaled

Data are not available.

• If on skin

Frequently or prolonged contact with skin may cause dermal irritation, May produce an allergic reaction, pruritis, localised redness

• 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.

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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 substance | CAS No | Endpoint | Value | Species | Exposure time |
| 2-Propanol | 67-63-0 | LC50 | 9.640 mg/l | Pimephales promelas | 96 h |
| Hematoxylin | 517-28-2 | LC50 | >35 mg/l | fish | 96 h |
| Hematoxylin | 517-28-2 | EC50 | 29,7 mg/l | aquatic invertebrates | 48 h |
| Acetic acid ... % | 64-19-7 | LC50 | >300,8 mg/l | fish | 96 h |
| Acetic acid ... % | 64-19-7 | EC50 | >300,8 mg/l | aquatic invertebrates | 48 h |
| Acetic acid ... % | 64-19-7 | ErC50 | >300,8 mg/l | algae | 72 h |
| Sodium iodate | 7681-55-2 | LC50 | 350 mg/l | fish | 96 h |

| Aquatic toxicity (chronic) of components of the mixture | | | | | |
|---|---------|----------|--------------|-----------------------|---------------|
| Name of substance | CAS No | Endpoint | Value | Species | Exposure time |
| 2-Propanol | 67-63-0 | LC50 | >10.000 mg/l | aquatic invertebrates | 24 h |

Biodegradation

The methods for determining the biological degradability are not applicable to inorganic substances.

12.2 Process of degradability

| Degradability of components of the mixture | | | | | | |
|--|----------|------------------|------------------|------|-----------------------------------|--------|
| Name of substance | CAS No | Process | Degradation rate | Time | Method | Source |
| 2-Propanol | 67-63-0 | biotic/abiotic | 95 % | 21 d | modifizierter OECD Screening Test | |
| 2-Propanol | 67-63-0 | oxygen depletion | 53 % | 5 d | | ECHA |
| Hematoxylin | 517-28-2 | DOC removal | ≥10 – ≤20 % | 28 d | | ECHA |
| Acetic acid ... % | 64-19-7 | biotic/abiotic | 99 % | 30 d | | |

12.3 Bioaccumulative potential

Data are not available.

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| Bioaccumulative potential of components of the mixture | | | | |
|--|-----------|------|------------------------------|----------|
| Name of substance | CAS No | BCF | Log KOW | BOD5/COD |
| 2-Propanol | 67-63-0 | | 0,05 | |
| Hematoxylin | 517-28-2 | | ≤0,3 (pH value: ~6,9, 30 °C) | |
| Acetic acid ... % | 64-19-7 | 3,16 | -0,17 (pH value: 7, 25 °C) | |
| Sodium iodate | 7681-55-2 | | -7,18 | |

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.

Sewage disposal-relevant information

Do not empty into drains.

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 | not subject to transport regulations |
| 14.2 UN proper shipping name | not assigned |
| 14.3 Transport hazard class(es) | none |
| 14.4 Packing group | not assigned |
| 14.5 Environmental hazards | non-environmentally hazardous acc. to the dangerous goods regulations |
| 14.6 Special precautions for user | There is no additional information. |

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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

Not subject to ADR, RID and ADN.

International Maritime Dangerous Goods Code (IMDG) - Additional information

Not subject to IMDG.

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

Not subject to ICAO-IATA.

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

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 |
| | not assigned | | |

Deco-Paint Directive

| | |
|-------------|--------|
| VOC content | 4,32 % |
|-------------|--------|

Industrial Emissions Directive (IED)

| | |
|-------------|--------|
| VOC content | 4,32 % |
|-------------|--------|

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 | Name acc. to inventory | CAS No | Listed in | Remarks |
| 2-Propanol | 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 endocrine-related functions in or via the aquatic environment | | a) | |

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List of pollutants (WFD)

| Name of substance | Name acc. to inventory | CAS No | Listed in | Remarks |
|-------------------|----------------------------|--------|-----------|---------|
| Sodium iodate | Metals and their compounds | | a) | |

Legend

A) Indicative list of the main pollutants

Regulation on the marketing and use of explosives precursors

none of the ingredients are listed

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

Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

National inventories

| Country | Inventory | Status |
|---------|------------|--------------------------------|
| AU | AIIC | 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

AIIC Australian Inventory of Industrial Chemicals
CICR Chemical Inventory and Control Regulation
CSCL-ENCS List of Existing and New Chemical Substances (CSCL-ENCS)
DSL Domestic Substances List (DSL)
ECSI EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC Inventory of Existing Chemical Substances Produced or Imported in China

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Legend

| | |
|------------|---|
| INSQ | National Inventory of Chemical Substances |
| ISHA-ENCS | Inventory of Existing and New Chemical Substances (ISHA-ENCS) |
| KECI | Korea Existing Chemicals Inventory |
| NZIoC | New Zealand Inventory of Chemicals |
| PICCS | Philippine Inventory of Chemicals and Chemical Substances (PICCS) |
| REACH Reg. | REACH registered substances |
| TCSI | Taiwan Chemical Substance Inventory |
| TSCA | Toxic Substance Control Act |

15.2 Chemical Safety Assessment

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

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Alignment to regulation:

Restructuring: section 9, section 14

| Section | Former entry (text/value) | Actual entry (text/value) | Safety-relevant |
|---------|--|--|-----------------|
| 2.1 | Classification according to Regulation (EC) No 1272/2008 (CLP): This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC. | Classification acc. to GHS: This mixture does not meet the criteria for classification. | yes |
| 2.1 | | Supplemental hazard information | yes |
| 2.1 | | Supplemental hazard information: change in the listing (table) | yes |
| 2.2 | Labelling according to Regulation (EC) No 1272/2008 (CLP): not required | Labelling | yes |
| 2.2 | | Pictograms: Not required | yes |
| 2.2 | | Supplemental hazard information | yes |
| 2.2 | | Supplemental hazard information: change in the listing (table) | yes |
| 2.3 | Other hazards: There is no additional information. | Other hazards | yes |
| 2.3 | | Results of PBT and vPvB assessment: This mixture does not contain any substances that are assessed to be a PBT or a vPvB. | yes |

Abbreviations and acronyms

| Abbr. | Descriptions of used abbreviations |
|-------------|---|
| 2017/164/EU | Commission Directive establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU |
| Acute Tox. | Acute toxicity |
| ADN | Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways) |
| ADR | Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road) |

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| Abbr. | Descriptions of used abbreviations |
|------------|---|
| 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 |
| COD | Chemical oxygen demand |
| DGR | Dangerous Goods Regulations (see IATA/DGR) |
| DNEL | Derived No-Effect Level |
| EC50 | Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval |
| 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-licence/) |
| EINECS | European Inventory of Existing Commercial Chemical Substances |
| ELINCS | European List of Notified Chemical Substances |
| 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 |
| IMDG | International Maritime Dangerous Goods Code |
| 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 |
| Ox. Sol. | Oxidising solid |
| PBT | Persistent, Bioaccumulative and Toxic |
| PNEC | Predicted No-Effect Concentration |
| ppm | Parts per million |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals |

Safety data sheet Safety data sheet

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



Hematoxylin solution acc. to Harris for microscopy

article number: **X903**

| Abbr. | Descriptions of used abbreviations |
|-------------|---|
| Resp. Sens. | Respiratory sensitisation |
| RID | Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail) |
| Skin Corr. | Corrosive to skin |
| Skin Irrit. | Irritant to skin |
| Skin Sens. | Skin sensitisation |
| STEL | Short-term exposure limit |
| STOT SE | Specific target organ toxicity - single exposure |
| 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

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). 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 section 2 and 3)

| Code | Text |
|------|--|
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H272 | May intensify fire; oxidiser. |
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H336 | May cause drowsiness or dizziness. |

Disclaimer

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