

# Safety data sheet

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



## D/E Neutralisation buffer ISO 16212, ISO 18416, ISO 21149, ISO 21150, ISO 22717, ISO 22718, for microscopy

article number: **1L8A**  
Version: **1.0 en**

date of compilation: 2021-07-26

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

#### 1.1 Product identifier

Identification of the substance

**D/E Neutralisation buffer** ISO 16212, ISO 18416, ISO 21149, ISO 21150, ISO 22717, ISO 22718, for microscopy

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Registration number (REACH)

not relevant (mixture)

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

Relevant identified uses:

Laboratory and analytical use  
Laboratory chemical

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](mailto:sicherheit@carlroth.de)

**Website:** [www.carlroth.de](http://www.carlroth.de)

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

**e-mail (competent person):**

**[sicherheit@carlroth.de](mailto:sicherheit@carlroth.de)**

#### 1.4 Emergency telephone number

| Name   | Street        | Postal code/city | Telephone   | Website   |
|--|---------------|------------------|-------------|---|
| National Poisons Information Centre<br>Beaumont Hospital | Beaumont Road | Dublin 9         | 01 809 2166 | <a href="https://www.poisons.ie/">https://www.poisons.ie/</a> |

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### 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.

#### 2.2 Label elements

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

not required

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### 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          |
|-------------------------------|---|------------|-------------------------------|------------|----------------|
| Sodium hydrogen-sulphite ...% | CAS No<br>7631-90-5<br><br>EC No<br>231-548-0<br><br>Index No<br>016-064-00-8<br><br>REACH Reg. No<br>01-2119524563-42-xxxx | 0,25 – < 1 | Acute Tox. 4 / H302<br>EUH031 |            | B(a)<br>GHS-HC |

#### 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)

| Name of substance            | Identifier  | Specific Conc. Limits | M-Factors | ATE       | Exposure route |
|------------------------------|---|-----------------------|-----------|-----------|----------------|
| Sodium hydrogensulphite ...% | CAS No<br>7631-90-5<br><br>EC No<br>231-548-0<br><br>Index No<br>016-064-00-8 | -                     | -         | 500 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.

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## Following skin contact

Rinse skin with water/shower.

## Following eye contact

Rinse cautiously with water for several minutes.

## Following ingestion

Rinse mouth. Call a doctor if you feel unwell.

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

Symptoms and effects are not known to date.

## 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, 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

None.

### 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.

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### Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece).

### 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

Store in a dry place. Store in a well-ventilated place.

### 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

### 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 <sup>3</sup> ] | STEL [ppm] | STEL [mg/m <sup>3</sup> ] | Ceiling-C [ppm] | Ceiling-C [mg/m <sup>3</sup> ] | Notation | Source               |
|---------|------------------|-----------|------------|-----------|--------------------------|------------|---------------------------|-----------------|--------------------------------|----------|----------------------|
| IE      | sodium bisulfite | 7631-90-5 | OELV       |           | 5                        |            |                           |                 |                                |          | S.I. No. 619 of 2001 |

#### Notation

Ceiling-C  
STEL

Ceiling value is a limit value above which exposure should not occur  
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)

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| 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              |
| Sodium hydrogen-sulphite ...%               | 7631-90-5 | DNEL      | 246 mg/m <sup>3</sup> | human, inhalatory                  | 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                |
| Sodium hydrogen-sulphite ...%               | 7631-90-5 | PNEC      | 1,09 mg/l       | aquatic organisms | freshwater                   | short-term (single instance) |
| Sodium hydrogen-sulphite ...%               | 7631-90-5 | PNEC      | 0,11 mg/l       | aquatic organisms | marine water                 | short-term (single instance) |
| Sodium hydrogen-sulphite ...%               | 7631-90-5 | PNEC      | 10,71 mg/l      | aquatic organisms | sewage treatment plant (STP) | short-term (single 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.

##### • 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.

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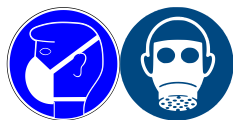
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### Respiratory protection



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   | violet  |
| Odour  | characteristic                                |
| Melting point/freezing point                             | ~0 °C   |
| Boiling point or initial boiling point and boiling range | ~100 °C at 1.013 hPa                          |
| 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)   | 7,4 – 7,8                                     |
| Kinematic viscosity                                      | not determined                                |
| <u>Solubility(ies)</u>                                   |   |
| Water solubility   | soluble                                       |
| <u>Partition coefficient</u>                             |   |
| Partition coefficient n-octanol/water (log value):       | this information is not available             |
| <u>Vapour pressure</u>                                   |   |
|  | 23,5 hPa at 20 °C<br>123,8 Pa at 50 °C        |
| Density  | 1,039 g/cm <sup>3</sup> at 20 °C              |
| Relative vapour density                                  | information on this property is not available |
| Particle characteristics                                 | not relevant (liquid)                         |

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### Other safety parameters

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: There is no additional information.

## 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 alkali, Strong acid

### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

### 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 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)

This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### Acute toxicity

Shall not be classified as acutely toxic.

| Acute toxicity |          |              |         |        |        |
|----------------|----------|--------------|---------|--------|--------|
| Exposure route | Endpoint | Value        | Species | Method | Source |
| oral           | LD50     | >2.000 mg/kg | rat     |        |        |

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| Acute toxicity estimate (ATE) of components of the mixture |           |                |           |
|--|-----------|----------------|-----------|
| Name of substance  | CAS No    | Exposure route | ATE       |
| Sodium hydrogensulphite ...%                               | 7631-90-5 | oral           | 500 mg/kg |

| Acute toxicity of components of the mixture |           |                          |          |              |         |
|---|-----------|--------------------------|----------|--------------|---------|
| Name of substance                           | CAS No    | Exposure route           | Endpoint | Value        | Species |
| Sodium hydrogensulphite ...%                | 7631-90-5 | inhalation:<br>dust/mist | LC50     | >5,5 mg/l/4h | rat     |
| Sodium hydrogensulphite ...%                | 7631-90-5 | dermal                   | LD50     | >2.000 mg/kg | 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

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

Data are not available.

#### • If inhaled

Data are not available.

#### • If on skin

Data are not available.



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### • Other information

Health effects are not known. This information is based upon the present state of our knowledge.

### 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 substance                                     | CAS No    | Endpoint | Value     | Species               | Exposure time |
| Sodium hydrogen-sulphite ...%                         | 7631-90-5 | LC50     | 62,3 mg/l | fish                  | 96 h          |
| Sodium hydrogen-sulphite ...%                         | 7631-90-5 | EC50     | 89 mg/l   | aquatic invertebrates | 48 h          |
| Sodium hydrogen-sulphite ...%                         | 7631-90-5 | ErC50    | 43,8 mg/l | algae                 | 72 h          |

| Aquatic toxicity (chronic) of components of the mixture |           |          |             |                |               |
|---|-----------|----------|-------------|----------------|---------------|
| Name of substance                                       | CAS No    | Endpoint | Value       | Species        | Exposure time |
| Sodium hydrogen-sulphite ...%                           | 7631-90-5 | EC50     | >1.000 mg/l | microorganisms | 3 h           |

### Biodegradation

Data are not available.

### 12.2 Process of degradability

Data are not available.

### 12.3 Bioaccumulative potential

Data are not available.

### 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.

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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods



Consult the appropriate local waste disposal expert about waste disposal.

#### **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

- |  |   |
|--|---|
| <b>14.1 UN number or ID number</b>   | not subject to transport regulations                                  |
| <b>14.2 UN proper shipping name</b>  | not assigned  |
| <b>14.3 Transport hazard class(es)</b>   | none  |
| <b>14.4 Packing group</b>  | not assigned  |
| <b>14.5 Environmental hazards</b>  | non-environmentally hazardous acc. to the dangerous goods regulations |
| <b>14.6 Special precautions for user</b>   | There is no additional information.                                   |
| <b>14.7 Maritime transport in bulk according to IMO instruments</b>  | The cargo is not intended to be carried in bulk.                      |
| <b>14.8 <u>Information for each of the UN Model Regulations</u></b>  |   |
| <b>Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - Additional information</b> | Not subject to ADR, RID and ADN.                                      |
| <b>International Maritime Dangerous Goods Code (IMDG) - Additional information</b>                           | Not subject to IMDG.  |
| <b>International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information</b>                    | Not subject to ICAO-IATA.   |

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## 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)

#### Restrictions according to REACH, Annex XVII

| Dangerous substances with restrictions (REACH, Annex XVII) |  |        |             |    |
|--|--|--------|-------------|----|
| Name of substance  | Name acc. to inventory   | CAS No | Restriction | No |
| Sodium hydrogensulphite ...%                               | this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC |        | R3          | 3  |

#### Legend

- R3
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,
  2. Articles not complying with paragraph 1 shall not be placed on the market.
  3. 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 (CEN).
  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.;

#### 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)

#### 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 | 0,5 %<br>2.911 g/l |
|-------------|--------------------|

#### Industrial Emissions Directive (IED)

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|   |           |
|---|-----------|
| <b>VOC content</b>                                  | 0,5 %     |
| <b>VOC content<br/>Water content was discounted</b> | 2.911 g/l |

### 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 |
| Sodium hydrogensulphite ...% | 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

### National inventories

| Country | Inventory  | Status                         |
|---------|------------|--------------------------------|
| AU      | AICS       | not 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. | not all ingredients are listed |
| JP      | CSCL-ENCS  | not all ingredients are listed |
| JP      | ISHA-ENCS  | not all ingredients are listed |
| KR      | KECI       | not all ingredients are listed |
| MX      | INSQ       | not all ingredients are listed |
| NZ      | NZIoC      | all ingredients are listed     |

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| Country | Inventory | Status                         |
|---------|-----------|--------------------------------|
| 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       | Australian Inventory of Chemical Substances                             |
| 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 |
| 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

### Abbreviations and acronyms

| Abbr.      | Descriptions of used abbreviations  |
|------------|---|
| 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)   |
| ATE        | Acute Toxicity Estimate   |
| 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  |
| 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)                                     |
| 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  |

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| Abbr.                | Descriptions of used abbreviations  |
|----------------------|---|
| 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   |
| 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  |
| 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  |
| 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 (Regulations concerning the International carriage of Dangerous goods by Rail) |
| S.I. No. 619 of 2001 | Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001   |
| STEL                 | Short-term exposure limit   |
| SVHC                 | Substance of Very High Concern  |
| TWA                  | Time-weighted average   |
| VOC                  | Volatile Organic Compounds  |
| vPvB                 | Very Persistent and very Bioaccumulative  |

### 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                  |
|------|-----------------------|
| H302 | Harmful if swallowed. |

# Safety data sheet

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



**D/E Neutralisation buffer ISO 16212, ISO 18416, ISO 21149, ISO 21150, ISO 22717, ISO 22718, for microscopy**

article number: **1L8A**

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## **Disclaimer**

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