

# Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



## Sulfuric acid Reag. Ph.Eur. 0,5 mol/l - 1 N volumetric standard solution

article number: **6794**

Version: **3.0 en**

Replaces version of: 2023-07-28

Version: (2)

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Revision: 2024-09-21

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

### 1.1 Product identifier

Identification of the substance

**Sulfuric acid** Reag. Ph.Eur. 0,5 mol/l - 1 N volumetric standard solution

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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 chemical  
Laboratory and analytical use

Uses advised against:

Do not use for private purposes (household).  
Food, drink and animal feedingstuffs.

### 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@carloth.de

**Website:** www.carloth.de

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

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

**sicherheit@carloth.de**

### 1.4 Emergency telephone number

| Name   | Street        | Postal code/city | Telephone       | Website   |
|--|---------------|------------------|-----------------|---|
| National Poisons Information Centre<br>Beaumont Hospital | Beaumont Road | Dublin 9         | +353 1 809 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)

| Section | Hazard class                             | Category | Hazard class and category | Hazard statement |
|---------|--|----------|---------------------------|------------------|
| 2.16    | Substance or mixture corrosive to metals | 1        | Met. Corr. 1              | H290             |

For full text of abbreviations: see SECTION 16

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### 2.2 Label elements

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

##### Signal word

Warning

##### Pictograms

GHS05



##### Hazard statements

H290

May be corrosive to metals

##### Precautionary statements

##### **Precautionary statements - prevention**

P234

Keep only in original packaging

##### **Precautionary statements - response**

P390

Absorb spillage to prevent material damage

##### **Precautionary statements - storage**

P406

Store in a corrosion-resistant container with a resistant inner liner

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

Signal word:

Hazard pictogram(s):

Not required

##### **Labelling of packages where the contents do not exceed 10 ml**

Signal word:

Hazard pictogram(s):

Not required



Hazard statements:

Precautionary statements:

Not required

Not required

### 2.3 Other hazards

#### **Results of PBT and vPvB assessment**

Does not contain a PBT-/vPvB-substance at a concentration of  $\geq 0,1\%$ .

#### **Endocrine disrupting properties**

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq 0,1\%$ .

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

not relevant (mixture)

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### 3.2 Mixtures

#### Description of the mixture

| Name of sub-stance  | Identifier  | Wt%     | Classification acc. to GHS                                       | Pictograms | Notes                |
|---------------------|---|---------|--|------------|----------------------|
| Sulphuric acid ...% | CAS No<br>7664-93-9<br><br>EC No<br>231-639-5<br><br>Index No<br>016-020-00-8<br><br>REACH Reg. No<br>01-2119458838-<br>20-xxxx | 4 - < 5 | Met. Corr. 1 / H290<br>Skin Corr. 1A / H314<br>Eye Dam. 1 / H318 |            | B<br>GHS-HC<br>IOELV |

#### Notes

B: Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

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-stance  | Identifier  | Specific Conc. Limits  | M-Factors | ATE | Exposure route |
|---------------------|---|--|-----------|-----|----------------|
| Sulphuric acid ...% | CAS No<br>7664-93-9<br><br>EC No<br>231-639-5<br><br>Index No<br>016-020-00-8 | Skin Corr. 1A; H314: $C \geq 15 \%$<br>Skin Irrit. 2; H315: $5 \% \leq C < 15 \%$<br>Eye Dam. 1; H318: $C \geq 15 \%$<br>Eye Irrit. 2; H319: $5 \% \leq C < 15 \%$ | -         | -   |                |

#### Remarks

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.

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

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 (CO<sub>2</sub>)

#### Unsuitable extinguishing media

water jet

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

Non-combustible.

### 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

Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray.

### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. The product is an acid. Before discharge into sewage plants the product normally needs to be neutralised.

### 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.

### 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.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

No special measures are necessary.

#### Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs.

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

Keep container tightly closed.

#### Incompatible substances or mixtures

Observe hints for combined storage. Incompatible materials: see section 10.

#### 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               |
|---------|---------------|-----------|------------|-----------|--------------------------|------------|---------------------------|-----------------|--------------------------------|----------|----------------------|
| EU      | sulfuric acid | 7664-93-9 | IOELV      |           | 0,05                     |            |                           |                 |                                | mist, t  | 2009/161/EU          |
| IE      | sulfuric acid | 7664-93-9 | OELV       |           | 0,05                     |            |                           |                 |                                | t, mist  | S.I. No. 619 of 2001 |

#### Notation

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

mist As mists

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)

t Thoracic fraction

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

| Name of substance   | CAS No    | Endpoint | Threshold level        | Protection goal, route of exposure | Used in           | Exposure time           |
|---------------------|-----------|----------|------------------------|------------------------------------|-------------------|-------------------------|
| Sulphuric acid ...% | 7664-93-9 | DNEL     | 0,05 mg/m <sup>3</sup> | human, inhalatory                  | worker (industry) | chronic - local effects |
| Sulphuric acid ...% | 7664-93-9 | DNEL     | 0,1 mg/m <sup>3</sup>  | human, inhalatory                  | worker (industry) | acute - local effects   |

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| Relevant PNECs of components |           |           |                 |                   |                              |                              |
|------------------------------|-----------|-----------|-----------------|-------------------|------------------------------|------------------------------|
| Name of substance            | CAS No    | End-point | Threshold level | Organism          | Environmental compartment    | Exposure time                |
| Sulphuric acid ...%          | 7664-93-9 | PNEC      | 0,003 mg/l      | aquatic organisms | freshwater                   | short-term (single instance) |
| Sulphuric acid ...%          | 7664-93-9 | PNEC      | 0 mg/l          | aquatic organisms | marine water                 | short-term (single instance) |
| Sulphuric acid ...%          | 7664-93-9 | PNEC      | 8,8 mg/l        | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| Sulphuric acid ...%          | 7664-93-9 | PNEC      | 0,002 mg/kg     | aquatic organisms | freshwater sediment          | short-term (single instance) |
| Sulphuric acid ...%          | 7664-93-9 | PNEC      | 0,002 mg/kg     | aquatic organisms | marine sediment              | 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. 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

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



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Respiratory protection necessary at: Aerosol or mist formation. Type: E (against acidic gases like sulphur dioxide or hydrogen chloride, colour code: Yellow). Usually no personal respiratory protection necessary.

### 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   | colourless                                     |
| Odour  | odourless                                      |
| 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)   | <2 (20 °C)                                     |
| 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  | not determined                                 |
| <u>Density and/or relative density</u>                   |  |
| Density  | 1,03 g/cm <sup>3</sup> at 20 °C                |
| 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:

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|                               |                                 |
|-------------------------------|---------------------------------|
| Corrosive to metals           | category 1: corrosive to metals |
| Other safety characteristics: |                                 |
| Miscibility                   | completely miscible with water  |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Substance or mixture corrosive to metals.

### 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

### 10.4 Conditions to avoid

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

### 10.5 Incompatible materials

different metals

### 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

Shall not be classified as acutely toxic.

| Acute toxicity of components |           |                |          |             |         |
|------------------------------|-----------|----------------|----------|-------------|---------|
| Name of substance            | CAS No    | Exposure route | Endpoint | Value       | Species |
| Sulphuric acid ...%          | 7664-93-9 | oral           | LD50     | 2.140 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.



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### 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.

#### • Other information

Due to its pH value (see section 9), irritation of the skin and eyes cannot be ruled out

### 11.2 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq 0,1\%$ .

### 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 |           |          |                     |                       |               |
|--|-----------|----------|---------------------|-----------------------|---------------|
| Name of substance                      | CAS No    | Endpoint | Value               | Species               | Exposure time |
| Sulphuric acid ...%                    | 7664-93-9 | EC50     | $>100 \text{ mg/l}$ | aquatic invertebrates | 48 h          |
| Sulphuric acid ...%                    | 7664-93-9 | ErC50    | $>100 \text{ mg/l}$ | algae                 | 72 h          |

### 12.2 Persistence and 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

Does not contain a PBT-/vPvB-substance at a concentration of  $\geq 0,1\%$ .

### 12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq 0,1\%$ .

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### 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. Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

### 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.

#### Properties of waste which render it hazardous

**HP 4** irritant - skin irritation and eye damage

### 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. Non-contaminated packages may be recycled.

## SECTION 14: Transport information

### 14.1 UN number or ID number

|           |         |
|-----------|---------|
| ADRRID    | UN 3264 |
| IMDG-Code | UN 3264 |
| ICAO-TI   | UN 3264 |

### 14.2 UN proper shipping name

|  |   |
|--|---|
| ADRRID                                 | CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. |
| IMDG-Code                              | CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. |
| ICAO-TI                                | Corrosive liquid, acidic, inorganic, n.o.s. |
| Technical name (hazardous ingredients) | Sulphuric acid ...%                         |

### 14.3 Transport hazard class(es)

|           |   |
|-----------|---|
| ADRRID    | 8 |
| IMDG-Code | 8 |
| ICAO-TI   | 8 |

### 14.4 Packing group

|        |     |
|--------|-----|
| ADRRID | III |
|--------|-----|

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IMDG-Code III

ICAO-TI III

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

#### Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) Additional information

Proper shipping name CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.

Particulars in the transport document UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (contains: Sulphuric acid ...%), 8, III, (E)

Classification code C1

Danger label(s) 8



Special provisions (SP) 274

Excepted quantities (EQ) E1

Limited quantities (LQ) 5 L

Transport category (TC) 3

Tunnel restriction code (TRC) E

Hazard identification No 80

#### Regulations concerning the International Carriage of Dangerous Goods by Rail (RID) Additional information

Classification code C1

Danger label(s) 8



Special provisions (SP) 274

Excepted quantities (EQ) E1

Limited quantities (LQ) 5 L

Transport category (TC) 3

Hazard identification No 80

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

Proper shipping name CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.

Particulars in the shipper's declaration UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (contains: Sulphuric acid ...%), 8, III, (E)


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|   |   |
|---|---|
|   | IC, N.O.S., (contains: Sulphuric acid ...%), 8, III |
| Marine pollutant  | -   |
| Danger label(s)   | 8   |
|  |   |
| Special provisions (SP)   | 223, 274  |
| Excepted quantities (EQ)  | E1  |
| Limited quantities (LQ)   | 5 L   |
| EmS   | F-A, S-B  |
| Stowage category  | A   |
| Segregation group   | 1 - Acids   |

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

|   |  |
|---|--|
| Proper shipping name  | Corrosive liquid, acidic, inorganic, n.o.s.  |
| Particulars in the shipper's declaration  | UN3264, Corrosive liquid, acidic, inorganic, n.o.s., (contains: Sulphuric acid ...%), 8, III |
| Danger label(s)   | 8  |
|  |  |
| Special provisions (SP)   | A3   |
| Excepted quantities (EQ)  | E1   |
| Limited quantities (LQ)   | 1 L  |

## 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 |
| Sulphuric acid ...%  | this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC |        | R3          | 3  |
| Sulphuric acid ...%  | substances in tattoo inks and permanent make-up  |        | R75         | 75 |

#### Legend

- R3
- 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

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- 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.;
- R75 1. Shall not be placed on the market in mixtures for use for tattooing purposes, and mixtures containing any such substances shall not be used for tattooing purposes, after 4 January 2022 if the substance or substances in question is or are present in the following circumstances:
- (a) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as carcinogen category 1A, 1B or 2, or germ cell mutagen category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight;
- (b) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as reproductive toxicant category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight;
- (c) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin sensitiser category 1, 1A or 1B, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight;
- (d) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin corrosive category 1, 1A, 1B or 1C or skin irritant category 2, or as serious eye damage category 1 or eye irritant category 2, the substance is present in the mixture in a concentration equal to or greater than:
- (i) 0,1 % by weight, if the substance is used solely as a pH regulator;
- (ii) 0,01 % by weight, in all other cases;
- (e) in the case of a substance listed in Annex II to Regulation (EC) No 1223/2009 (\*1), the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight;
- (f) in the case of a substance for which a condition of one or more of the following kinds is specified in column g (Product type, Body parts) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight:
- (i) "Rinse-off products";
- (ii) "Not to be used in products applied on mucous membranes";
- (iii) "Not to be used in eye products";
- (g) in the case of a substance for which a condition is specified in column h (Maximum concentration in ready for use preparation) or column i (Other) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present in the mixture in a concentration, or in some other way, that does not accord with the condition specified in that column;
- (h) in the case of a substance listed in Appendix 13 to this Annex, the substance is present in the mixture in a concentration equal to or greater than the concentration limit specified for that substance in that Appendix.
2. For the purposes of this entry use of a mixture "for tattooing purposes" means injection or introduction of the mixture into a person's skin, mucous membrane or eyeball, by any process or procedure (including procedures commonly referred to as permanent make-up, cosmetic tattooing, micro-blading and micro-pigmentation), with the aim of making a mark or design on his or her body.
3. If a substance not listed in Appendix 13 falls within more than one of points (a) to (g) of paragraph 1, the strictest concentration limit laid down in the points in question shall apply to that substance. If a substance listed in Appendix 13 also falls within one or more of points (a) to (g) of paragraph 1, the concentration limit laid down in point (h) of paragraph 1 shall apply to that substance.
4. By way of derogation, paragraph 1 shall not apply to the following substances until 4 January 2023:
- (a) Pigment Blue 15:3 (CI 74160, EC No 205-685-1, CAS No 147-14-8);
- (b) Pigment Green 7 (CI 74260, EC No 215-524-7, CAS No 1328-53-6).
5. If Part 3 of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify or re-classify a substance such that the substance then becomes caught by point (a), (b), (c) or (d) of paragraph 1 of this entry, or such that it then falls within a different one of those points from the one within which it fell previously, and the date of application of that new or revised classification is after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect on the date of application of that new or revised classification.
6. If Annex II or Annex IV to Regulation (EC) No 1223/2009 is amended after 4 January 2021 to list or change the listing of a substance such that the substance then becomes caught by point (e), (f) or (g) of paragraph 1 of this entry, or such that it then falls within a different one of those points from the one within which it fell previously, and the amendment takes effect after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect from the date falling 18 months after entry into force of the act by which that amendment was made.
7. Suppliers placing a mixture on the market for use for tattooing purposes shall ensure that, after 4 January 2022, the mixture is marked with the following information:
- (a) the statement "Mixture for use in tattoos or permanent make-up";
- (b) a reference number to uniquely identify the batch;
- (c) the list of ingredients in accordance with the nomenclature established in the glossary of common ingredient names pursuant to Article 33 of Regulation (EC) No 1223/2009, or in the absence of a common ingredient name, the IUPAC name. In the absence of a common ingredient name or IUPAC name, the CAS and EC number. Ingredients shall be listed in descending order by weight or volume of the ingredients at the time of formulation. "Ingredient" means any substance added during the process of formulation and present in the mixture for use for tattooing purposes. Impurities shall not be regarded as ingredients. If the name of a substance, used as ingredient within the meaning of this entry, is already required to be stated on the label in accordance with Regulation (EC) No 1272/2008, that ingredient does not need to be marked in accordance with this Regulation;
- (d) the additional statement "pH regulator" for substances falling under point (d)(i) of paragraph 1;
- (e) the statement "Contains nickel. Can cause allergic reactions." if the mixture contains nickel below the concentration limit specified in Appendix 13;

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(f) the statement "Contains chromium (VI). Can cause allergic reactions." if the mixture contains chromium (VI) below the concentration limit specified in Appendix 13;

(g) safety instructions for use insofar as they are not already required to be stated on the label by Regulation (EC) No 1272/2008.

The information shall be clearly visible, easily legible and marked in a way that is indelible.

The information shall be written in the official language(s) of the Member State(s) where the mixture is placed on the market, unless the Member State(s) concerned provide(s) otherwise.

Where necessary because of the size of the package, the information listed in the first subparagraph, except for point (a), shall be included instead in the instructions for use.

Before using a mixture for tattooing purposes, the person using the mixture shall provide the person undergoing the procedure with the information marked on the package or included in the instructions for use pursuant to this paragraph.

8. Mixtures that do not contain the statement "Mixture for use in tattoos or permanent make-up" shall not be used for tattooing purposes.

9. This entry does not apply to substances that are gases at temperature of 20 °C and pressure of 101,3 kPa, or generate a vapour pressure of more than 300 kPa at temperature of 50 °C, with the exception of formaldehyde (CAS No 50-00-0, EC No 200-001-8).

10. This entry does not apply to the placing on the market of a mixture for use for tattooing purposes, or to the use of a mixture for tattooing purposes, when placed on the market exclusively as a medical device or an accessory to a medical device, within the meaning of Regulation (EU) 2017/745, or when used exclusively as a medical device or an accessory to a medical device, within the same meaning. Where the placing on the market or use may not be exclusively as a medical device or an accessory to a medical device, the requirements of Regulation (EU) 2017/745 and of this Regulation shall apply cumulatively.

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

none of the ingredients are listed

### 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 %   |
| VOC content (Water content was discounted) | 0 g/l |

### Industrial Emissions Directive (IED)

|  |       |
|--|-------|
| VOC content                                | 0 %   |
| VOC content (Water content was discounted) | 0 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 |
| Sulphuric acid ...%      | Substances and preparations, or the breakdown products of such, which have been proved to possess carcinogenic or mutagenic properties or properties which |        | a)        |         |

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| List of pollutants (WFD) |  |        |           |         |
|--------------------------|--|--------|-----------|---------|
| Name of substance        | Name acc. to inventory   | CAS No | Listed in | Remarks |
|                          | may affect steroidogenic, thyroid, reproduction or other endocrine-related functions in or via the aquatic environment |        |           |         |

### Legend

a) Indicative list of the main pollutants

## Regulation on the marketing and use of explosives precursors

| Explosives precursors which are subject to restrictions |           |     |                      |              |                |  |
|---|-----------|-----|----------------------|--------------|----------------|--|
| Name of substance                                       | CAS No    | Wt% | Type of registration | Re-<br>marks | Limit<br>value | Upper<br>limit<br>value<br>for the<br>purpose<br>of li-<br>censing<br>under<br>Article<br>5(3) |
| Sulphuric acid ...%                                     | 7664-93-9 | 4,9 | Annex I              |              | 15 % w/w       | 40 % w/w   |

### Legend

Annex I Substances which shall not be made available to members of the general public on their own, or in mixtures or substances including them, except if the concentration is equal to or lower than the limit values set out below

### Additional statements

If the product is passed on to third parties, in accordance with Article 7 "Notification of the supply chain" of Regulation EU 2019/1148, the information obligation is subject to the entire supply chain and all other provisions mentioned in Article 7 on restricted and regulated raw materials.

## Regulation on drug precursors

| Name of substance   | CAS No    | Wt% | Classification | CN Code       | Threshold<br>level |
|---------------------|-----------|-----|----------------|---------------|--------------------|
| Sulphuric acid ...% | 7664-93-9 | 4,9 | Category 3     | 2807 00<br>00 |                    |

## 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.

## UN Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances

| Name of substance   | CAS No    | Listed in | HS code |
|---------------------|-----------|-----------|---------|
| Sulphuric acid ...% | 7664-93-9 | Table II  | 2807.00 |

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### National inventories

| Country | Inventory  | Status                              |
|---------|------------|-------------------------------------|
| AU      | AIIC       | all ingredients are listed          |
| CA      | DSL        | 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  | all ingredients are listed          |
| JP      | ISHA-ENCS  | not all ingredients are listed      |
| KR      | KECI       | all ingredients are listed          |
| MX      | INSQ       | 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       | all ingredients are listed (ACTIVE) |
| VN      | NCI        | 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 |
| INSQ       | National Inventory of Chemical Substances                               |
| ISHA-ENCS  | Inventory of Existing and New Chemical Substances (ISHA-ENCS)           |
| KECI       | Korea Existing Chemicals Inventory                                      |
| NCI        | National Chemical 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

According to REACH, Article 14 (1) a chemical safety assessment has been carried out for this substance or components of this mixture when the substance has been registered in quantities of 10 tonnes or more per year per registrant.

## SECTION 16: Other information

### Indication of changes (revised safety data sheet)

| Section | Former entry (text/value) | Actual entry (text/value)   | Safety-relevant |
|---------|---------------------------|---|-----------------|
| 2.2     |                           | Labelling of packages where the contents do not exceed 125 ml:<br>change in the listing (table) | yes             |
| 2.2     |                           | Labelling of packages where the contents do not exceed 125 ml:<br>change in the listing (table) | yes             |
| 2.2     |                           | Hazard pictogram(s):<br>Not required  | yes             |



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| Section | Former entry (text/value)  | Actual entry (text/value)   | Safety-relevant |
|---------|--|---|-----------------|
| 2.2     |  | Labelling of packages where the contents do not exceed 10 ml  | yes             |
| 2.2     |  | Signal word:<br>Not required  | yes             |
| 2.2     |  | Hazard pictogram(s):  | yes             |
| 2.2     |  | Hazard pictogram(s):<br>change in the listing (table)   | yes             |
| 2.2     |  | Hazard statements:<br>Not required  | yes             |
| 2.2     |  | Precautionary statements:<br>Not required   | yes             |
| 2.3     | Results of PBT and vPvB assessment:<br>Does not contain a PBT-/vPvB-substance in a concentration of $\geq 0,1\%$ .     | Results of PBT and vPvB assessment:<br>Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0,1\%$ .    | yes             |
| 2.3     | Endocrine disrupting properties:<br>Does not contain an endocrine disruptor (EDC) in a concentration of $\geq 0,1\%$ . | Endocrine disrupting properties:<br>Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$ . | yes             |
| 15.1    |  | National inventories:<br>change in the listing (table)  | yes             |

### Abbreviations and acronyms

| Abbr.       | Descriptions of used abbreviations   |
|-------------|--|
| 2009/161/EU | Commission Directive establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC |
| 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   |
| CN Code     | Combined Nomenclature  |
| 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)            |
| ED          | Endocrine disruptor  |
| EINECS      | European Inventory of Existing Commercial Chemical Substances  |
| ELINCS      | European List of Notified Chemical Substances  |
| EmS         | Emergency Schedule   |
| ErC50       | $\equiv$ 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  |

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| Abbr.                | Descriptions of used abbreviations  |
|----------------------|---|
| GHS                  | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations   |
| HS                   | Harmonized Commodity Description and Coding System (Harmonized System, drawn up by the World Customs Organisation)  |
| 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   |
| 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  |
| LD50                 | Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval  |
| Met. Corr.           | Substance or mixture corrosive to metals  |
| 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   |
| Skin Corr.           | Corrosive to skin   |
| Skin Irrit.          | Irritant to skin  |
| 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.

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).

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

| Code | Text                                     |
|------|--|
| H290 | May be corrosive to metals.              |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage.               |

### Disclaimer

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