

Safety data sheet

Safe Work Australia - Code of Practice



Roti®-Quant 5x concentrate

article number: **K015**
Version: **GHS 2.0 en**
Replaces version of: 2016-11-17
Version: (GHS 1)

date of compilation: 2016-11-17
Revision: 2020-02-18

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

1.1 Product identifier

| | |
|---------------------------------|------------------------|
| Identification of the substance | Roti®-Quant |
| Article number | K015 |
| Registration number (REACH) | not relevant (mixture) |

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

Identified uses: laboratory chemical

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 |
|--|-----------------|--------------------|-----------|---------|
| NSW Poisons Information Centre Childrens Hospital | Hawkesbury Road | 2145 Westmead, NSW | 131126 | |

Emergency information service

Poison Centre Munich: +49/(0)89 19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

| Classification acc. to GHS | | | |
|----------------------------|--|---------------------------|------------------|
| Section | Hazard class | Hazard class and category | Hazard statement |
| 2.6 | flammable liquid | (Flam. Liq. 3) | H226 |
| 2.16 | substance or mixture corrosive to metals | (Met. Corr. 1) | H290 |
| 3.2 | skin corrosion/irritation | (Skin Corr. 1A) | H314 |
| 3.3 | serious eye damage/eye irritation | (Eye Dam. 1) | H318 |

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2.2 Label elements

Labelling GHS

Signal word

Danger

Pictograms

GHS02, GHS05



Hazard statements

H226 Flammable liquid and vapour
H290 May be corrosive to metals
H314 Causes severe skin burns and eye damage

Precautionary statements

Precautionary statements - prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P260 Do not breathe dusts or mists.
P280 Wear eye protection/face protection.

Precautionary statements - response

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P370+P378 In case of fire: Use sand, carbon dioxide or powder extinguisher for extinction.

Precautionary statements - storage

P403+P235 Store in a well-ventilated place. Keep cool.

Hazardous ingredients for labelling: ortho-Phosphoric acid

Labelling of packages where the contents do not exceed 125 ml

Signal word: **Danger**

Symbol(s)



H314 Causes severe skin burns and eye damage.
P260 Do not breathe dusts or mists.
P280 Wear eye protection/face protection.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
contains: Ortho-Phosphoric acid

2.3 Other hazards

There is no additional information.

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description of the mixture

Composition/information on ingredients.

| Name of substance | Identifier | wt% | Classification acc. to 1272/2008/EC | Pictograms | Specific Conc. Limits |
|-----------------------|---|--------------|--|---|--|
| ortho-Phosphoric acid | CAS No 7664-38-2 EC No 231-633-2 Index No 015-011-00-6 REACH Reg. No 01-2119485924-24-xxxx | ≥ 50 | Met. Corr. 1 / H290 Skin Corr. 1B / H314 Eye Dam. 1 / H318 |  | Skin Corr. 1B; H314: C ≥ 25 % Skin Irrit. 2; H315: 10 % ≤ C < 25 % Eye Dam. 1; H318: C ≥ 25 % Eye Irrit. 2; H319: 10 % ≤ C < 25 % |
| Ethanol | CAS No 64-17-5 EC No 200-578-6 Index No 603-002-00-5 REACH Reg. No 01-2119457610-43-XXXX | 10 – < 25 | Flam. Liq. 2 / H225 Eye Irrit. 2 / H319 |  | |

Remarks

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures



General notes

Take off immediately all contaminated clothing. Self-protection of the first aider.

Following inhalation

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

Following skin contact

After contact with skin, wash immediately with plenty of water. Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

Following eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye.

Following ingestion

Rinse mouth immediately and drink plenty of water. Call a physician immediately. If swallowed

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danger of perforation of the esophagus and the stomach (strong corrosive effects).

4.2 Most important symptoms and effects, both acute and delayed

Corrosion, Vomiting, Risk of blindness, Gastric perforation, Risk of serious damage to eyes

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 fire-fighting measures to the fire surroundings
water spray, foam, alcohol resistant foam, dry extinguishing powder, carbon dioxide (CO₂)

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Combustible. Vapours can form explosive mixtures with air.

Hazardous combustion products

May produce toxic fumes of carbon monoxide if burning.

5.3 Advice for firefighters

Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus. Wear full chemical protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures



For non-emergency personnel

Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray. Avoidance of ignition sources.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Explosive properties.

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 (e.g. sand, diatomaceous earth, acid- or universal binding agents).

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Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

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

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provision of sufficient ventilation. Handle and open container with care. Clear contaminated areas thoroughly.

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



Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharge.

Advice on general occupational hygiene

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

7.2 Conditions for safe storage, including any incompatibilities

Keep in a cool place.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice

Ground/bond container and receiving equipment.

• Ventilation requirements

Use local and general ventilation.

• Specific designs for storage rooms or vessels

Recommended storage temperature: 4 °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 | Notation | Identifier | TWA [ppm] | TWA [mg/m ³] | STEL [ppm] | STEL [mg/m ³] | Ceiling-C [ppm] | Ceiling-C [mg/m ³] | Source |
|---------|--|-----------|----------|------------|-----------|--------------------------|------------|---------------------------|-----------------|--------------------------------|--------|
| AU | ethyl alcohol (ethanol) | 64-17-5 | | WES | 1,000 | 1,880 | | | | | WES |
| AU | phosphoric acid (orthophosphoric acid) | 7664-38-2 | | WES | | 1 | | 3 | | | WES |

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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/DMELs/PNECs and other threshold levels

• 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 |
|-----------------------|-----------|-----------|-------------------------|------------------------------------|-------------------|----------------------------|
| ortho-Phosphoric acid | 7664-38-2 | DNEL | 2 mg/m ³ | human, inhalatory | worker (industry) | acute - local effects |
| ortho-Phosphoric acid | 7664-38-2 | DNEL | 1 mg/m ³ | human, inhalatory | worker (industry) | chronic - local effects |
| Ethanol | 64-17-5 | DNEL | 1,900 mg/m ³ | human, inhalatory | worker (industry) | acute - systemic effects |
| Ethanol | 64-17-5 | DNEL | 343 mg/kg | human, dermal | worker (industry) | chronic - systemic effects |
| Ethanol | 64-17-5 | DNEL | 950 mg/m ³ | human, inhalatory | worker (industry) | chronic - systemic effects |

• relevant PNECs of components of the mixture

| Name of substance | CAS No | Endpoint | Threshold level | Environmental compartment | Exposure time |
|-------------------|---------|----------|-------------------------|------------------------------|----------------------|
| Ethanol | 64-17-5 | PNEC | 0.79 mg/cm ³ | marine water | intermittent release |
| Ethanol | 64-17-5 | PNEC | 2.75 mg/cm ³ | air | intermittent release |
| Ethanol | 64-17-5 | PNEC | 3.6 mg/cm ³ | freshwater sediment | intermittent release |
| Ethanol | 64-17-5 | PNEC | 580 mg/cm ³ | sewage treatment plant (STP) | intermittent release |
| Ethanol | 64-17-5 | PNEC | 0.63 mg/cm ³ | soil | intermittent release |
| Ethanol | 64-17-5 | PNEC | 0.96 mg/cm ³ | freshwater | intermittent release |

8.2 Exposure controls

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection. Wear face protection.

Skin protection



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• hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

• type of material

Butyl caoutchouc (butyl rubber)

• material thickness

0,7mm

• breakthrough times of the glove material

>480 minutes (permeation: level 6)

• 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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

| | |
|-----------------|-------------------|
| Physical state | liquid (fluid) |
| Colour | dark red |
| Odour | like: alcohol |
| Odour threshold | No data available |

Other physical and chemical parameters

| | |
|---|------------------------------------|
| pH (value) | <2 |
| Melting point/freezing point | not determined |
| Initial boiling point and boiling range | This information is not available. |
| Flash point | 36 °C |
| Evaporation rate | no data available |
| Flammability (solid, gas) | not relevant (fluid) |

Explosive limits

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| | |
|---------------------------------|--|
| • lower explosion limit (LEL) | 3.5 vol% |
| • upper explosion limit (UEL) | 15 vol% |
| Explosion limits of dust clouds | not relevant |
| Vapour pressure | 59 hPa at 20 °C |
| Density | 1.37 g/cm ³ at 20 °C |
| Vapour density | This information is not available. |
| Bulk density | Not applicable |
| Relative density | Information on this property is not available. |
| <u>Solubility(ies)</u> | |
| Water solubility | miscible in any proportion |
| <u>Partition coefficient</u> | |
| n-octanol/water (log KOW) | This information is not available. |
| Auto-ignition temperature | Information on this property is not available. |
| Decomposition temperature | no data available |
| Viscosity | not determined |
| Explosive properties | Shall not be classified as explosive |
| Oxidising properties | none |

9.2 Other information

There is no additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity

Risk of ignition. Substance or mixture corrosive to metals. In case of warming: Vapours can form explosive mixtures with air.

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

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.

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Shall not be classified as acutely toxic.

Skin corrosion/irritation

Causes severe burns.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Summary of evaluation of the CMR properties

Shall not be classified as germ cell mutagenic, carcinogenic nor 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

If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects)

• If in eyes

causes burns, Causes serious eye damage, risk of blindness

• If inhaled

cough, pain, choking, and breathing difficulties

• If on skin

causes severe burns, causes poorly healing wounds

Other information

None

SECTION 12: Ecological information

12.1 Toxicity

acc. to 1272/2008/EC: Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute)

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Aquatic toxicity (acute) of components of the mixture

| Name of substance | CAS No | Endpoint | Value | Species | Exposure time |
|-----------------------|-----------|----------|---------------------|-----------------------|---------------|
| ortho-Phosphoric acid | 7664-38-2 | EC50 | >100 mg/l | aquatic invertebrates | 48 h |
| ortho-Phosphoric acid | 7664-38-2 | ErC50 | >100 mg/l | algae | 72 h |
| Ethanol | 64-17-5 | LC50 | 8,140 mg/l | orfe (Leuciscus idus) | 96 h |
| Ethanol | 64-17-5 | EC50 | 9,000 – 14,000 mg/l | daphnia magna | 48 h |

Aquatic toxicity (chronic)

Aquatic toxicity (chronic) of components of the mixture

| Name of substance | CAS No | Endpoint | Value | Species | Exposure time |
|-----------------------|-----------|----------|-------------|----------------|---------------|
| ortho-Phosphoric acid | 7664-38-2 | EC50 | >1,000 mg/l | microorganisms | 3 h |

12.2 Process of degradability

Data are not available.

Degradability of components of the mixture

| Name of substance | CAS No | Process | Degradation rate | Time |
|-------------------|---------|----------------|------------------|------|
| Ethanol | 64-17-5 | biotic/abiotic | 94 % | d |

12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components of the mixture

| Name of substance | CAS No | BCF | Log KOW | BOD5/COD |
|-------------------|---------|-----|---------|----------|
| Ethanol | 64-17-5 | | -0.31 | |

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 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.


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.

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 | 2924 |
| 14.2 UN proper shipping name Hazardous ingredients | FLAMMABLE LIQUID, CORROSIVE, N.O.S. PHOSPHORIC ACID, SOLUTION, ETHANOL |
| 14.3 Transport hazard class(es) |  |
| Class | 3 (flammable liquids) |
| 14.4 Packing group | III (substance presenting low danger) |
| 14.5 Environmental hazards | none (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 Transport in bulk according to Annex II of MARPOL and the IBC Code | The cargo is not intended to be carried in bulk. |
| 14.8 Information for each of the UN Model Regulations | <ul style="list-style-type: none"> • Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) |
| UN number | 2924 |
| Proper shipping name | FLAMMABLE LIQUID, CORROSIVE, N.O.S. |
| Particulars in the transport document | UN2924, FLAMMABLE LIQUID, CORROSIVE, N.O.S., (contains: PHOSPHORIC ACID, SOLUTION, ETHANOL), 3 (8), III, (D/E) |
| Class | 3 |



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| | |
|---|--|
| Classification code | FC |
| Packing group | III |
| Danger label(s) | 3+8 |
|  | |
| Special provisions (SP) | 274 |
| Excepted quantities (EQ) | E1 |
| Limited quantities (LQ) | 5 L |
| Transport category (TC) | 3 |
| Tunnel restriction code (TRC) | D/E |
| Hazard identification No | 38 |
| Emergency Action Code | 3W |
| • International Maritime Dangerous Goods Code (IMDG) | |
| UN number | 2924 |
| Proper shipping name | FLAMMABLE LIQUID, CORROSIVE, N.O.S. |
| Particulars in the shipper's declaration | UN2924, FLAMMABLE LIQUID, CORROSIVE, N.O.S., (contains: PHOSPHORIC ACID, SOLUTION, ETHANOL), 3 (8), III, 36°C c.c. |
| Class | 3 |
| Subsidiary risk(s) | 8 |
| Marine pollutant | - |
| Packing group | III |
| Danger label(s) | 3+8 |
|  | |
| Special provisions (SP) | 223, 274 |
| Excepted quantities (EQ) | E1 |
| Limited quantities (LQ) | 5 L |
| EmS | F-E, S-C |
| Stowage category | A |
| • International Civil Aviation Organization (ICAO-IATA/DGR) | |
| UN number | 2924 |
| Proper shipping name | Flammable liquid, corrosive, n.o.s. |
| Particulars in the shipper's declaration | UN2924, Flammable liquid, corrosive, n.o.s., (contains: PHOSPHORIC ACID, SOLUTION, ETHANOL), 3 (8), III |
| Class | 3 |

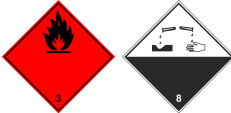
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| | |
|---|-----|
| Subsidiary risk(s) | 8 |
| Packing group | III |
| Danger label(s) | 3+8 |
|  | |
| Special provisions (SP) | A3 |
| Excepted quantities (EQ) | E1 |
| Limited quantities (LQ) | 1 L |

SECTION 15: Regulatory information

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

National inventories

| Country | National inventories | Status |
|---------|----------------------|--------------------------------|
| AU | AICS | 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 |
| 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 | 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 |
| KECI | Korea Existing Chemicals Inventory |
| NZIoC | New Zealand Inventory of Chemicals |
| PICCS | Philippine Inventory of Chemicals and Chemical Substances |
| 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)

| Section | Former entry (text/value) | Actual entry (text/value) | Safety-relevant |
|---------|--|---|-----------------|
| 2.1 | | Classification acc. to GHS: change in the listing (table) | yes |
| 2.1 | Remarks: For full text of Hazard- and EU Hazard-statements: see SECTION 16. | | yes |
| 2.2 | Signal word: Warning | Signal word: Danger | yes |
| 2.2 | | Pictograms: change in the listing (table) | yes |
| 2.2 | | Hazard statements: change in the listing (table) | yes |
| 2.2 | | Precautionary statements - prevention: change in the listing (table) | yes |
| 2.2 | | Precautionary statements - response: change in the listing (table) | yes |
| 2.2 | Precautionary statements - disposal | | yes |
| 2.2 | | Precautionary statements - disposal: change in the listing (table) | yes |
| 2.2 | | Hazardous ingredients for labelling: ortho-Phosphoric acid | yes |
| 2.2 | Labelling of packages where the contents do not exceed 125 ml: Signal word: Warning | Labelling of packages where the contents do not exceed 125 ml: Signal word: Danger | yes |
| 2.2 | | Labelling of packages where the contents do not exceed 125 ml: change in the listing (table) | yes |
| 2.2 | | Labelling of packages where the contents do not exceed 125 ml: change in the listing (table) | yes |
| 2.2 | | Labelling of packages where the contents do not exceed 125 ml: change in the listing (table) | yes |
| 2.2 | | contains: Ortho-Phosphoric acid | yes |
| 3.2 | | Description of the mixture: change in the listing (table) | yes |
| 8.1 | | Relevant DNELs/DMELs/PNECs and other threshold levels | yes |
| 8.1 | | • relevant DNELs of components of the mixture | yes |
| 8.1 | | • relevant DNELs of components of the mixture: change in the listing (table) | yes |
| 8.1 | | • relevant PNECs of components of the mixture | yes |
| 8.1 | | • relevant PNECs of components of the mixture: change in the listing (table) | yes |
| 14.1 | UN number: 2920 | UN number: 2924 | yes |

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| Section | Former entry (text/value) | Actual entry (text/value) | Safety-relevant |
|---------|--|---|-----------------|
| 14.2 | UN proper shipping name: CORROSIVE LIQUID, FLAMMABLE, N.O.S. | UN proper shipping name: FLAMMABLE LIQUID, CORROSIVE, N.O.S. | yes |
| 14.3 | Transport hazard class(es) | Transport hazard class(es): class 3 hazard - flammable liquids | yes |
| 14.3 | Class: 8 (corrosive substances) | Class: 3 (flammable liquids) | yes |
| 14.4 | Packing group: II (substance presenting medium danger) | Packing group: III (substance presenting low danger) | yes |
| 14.8 | UN number: 2920 | UN number: 2924 | yes |
| 14.8 | Proper shipping name: CORROSIVE LIQUID, FLAMMABLE, N.O.S. | Proper shipping name: FLAMMABLE LIQUID, CORROSIVE, N.O.S. | yes |
| 14.8 | Particulars in the transport document: UN2920, CORROSIVE LIQUID, FLAMMABLE, N.O.S., (contains: PHOSPHORIC ACID, SOLU- TION, ETHANOL), 8 (3), II, (D/E) | Particulars in the transport document: UN2924, FLAMMABLE LIQUID, CORROSIVE, N.O.S., (contains: PHOSPHORIC ACID, SOLU- TION, ETHANOL), 3 (8), III, (D/E) | yes |
| 14.8 | Class: 8 | Class: 3 | yes |
| 14.8 | Classification code: CF1 | Classification code: FC | yes |
| 14.8 | Packing group: II | Packing group: III | yes |
| 14.8 | Danger label(s): 8+3 | Danger label(s): 3+8 | yes |
| 14.8 | Excepted quantities (EQ): E2 | Excepted quantities (EQ): E1 | yes |
| 14.8 | Limited quantities (LQ): 1 L | Limited quantities (LQ): 5 L | yes |
| 14.8 | Transport category (TC): 2 | Transport category (TC): 3 | yes |
| 14.8 | Hazard identification No: 83 | Hazard identification No: 38 | yes |
| 14.8 | UN number: 2920 | UN number: 2924 | yes |
| 14.8 | Proper shipping name: CORROSIVE LIQUID, FLAMMABLE, N.O.S. | Proper shipping name: FLAMMABLE LIQUID, CORROSIVE, N.O.S. | yes |
| 14.8 | Particulars in the shipper's declaration: UN2920, CORROSIVE LIQUID, FLAMMABLE, N.O.S., (contains: PHOSPHORIC ACID, SOLU- TION, ETHANOL), 8 (3), II, 36°C c.c. | Particulars in the shipper's declaration: UN2924, FLAMMABLE LIQUID, CORROSIVE, N.O.S., (contains: PHOSPHORIC ACID, SOLU- TION, ETHANOL), 3 (8), III, 36°C c.c. | yes |
| 14.8 | Class: 8 | Class: 3 | yes |
| 14.8 | Subsidiary risk(s): 3 | Subsidiary risk(s): 8 | yes |
| 14.8 | | Marine pollutant: - | yes |
| 14.8 | Packing group: II | Packing group: III | yes |
| 14.8 | Danger label(s): 8+3 | Danger label(s): 3+8 | yes |

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| Section | Former entry (text/value) | Actual entry (text/value) | Safety-relevant |
|---------|---------------------------------|---|-----------------|
| 14.8 | Special provisions (SP): 274 | Special provisions (SP): 223, 274 | yes |
| 14.8 | Excepted quantities (EQ): E2 | Excepted quantities (EQ): E1 | yes |
| 14.8 | Limited quantities (LQ): 1 L | Limited quantities (LQ): 5 L | yes |
| 14.8 | Stowage category: C | Stowage category: A | yes |
| 14.8 | | • International Civil Aviation Organization (ICAO-IATA/DGR) | yes |
| 14.8 | | UN number: 2924 | yes |
| 14.8 | | Proper shipping name: Flammable liquid, corrosive, n.o.s. | yes |
| 14.8 | | Particulars in the shipper's declaration: UN2924, Flammable liquid, corrosive, n.o.s., (contains: PHOSPHORIC ACID, SOLUTION, ETHANOL), 3 (8), III | yes |
| 14.8 | | Class: 3 | yes |
| 14.8 | | Subsidiary risk(s): 8 | yes |
| 14.8 | | Packing group: III | yes |
| 14.8 | | Danger label(s): 3+8 | yes |
| 14.8 | | Danger label(s): change in the listing (table) | yes |
| 14.8 | | Special provisions (SP): A3 | yes |
| 14.8 | | Excepted quantities (EQ): E1 | yes |
| 14.8 | | Limited quantities (LQ): 1 L | yes |

Abbreviations and acronyms

| Abbr. | Descriptions of used abbreviations |
|-----------|---|
| 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 européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road) |
| 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 |
| CMR | Carcinogenic, Mutagenic or toxic for Reproduction |
| COD | chemical oxygen demand |

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| Abbr. | Descriptions of used abbreviations |
|-------------|---|
| DGR | Dangerous Goods Regulations (see IATA/DGR) |
| DMEL | Derived Minimal Effect Level |
| 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 |
| EmS | Emergency Schedule |
| ErC50 | ≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control |
| Eye Dam. | seriously damaging to the eye |
| Eye Irrit. | irritant to the eye |
| Flam. Liq. | flammable liquid |
| GHS | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations |
| IATA | International Air Transport Association |
| IATA/DGR | Dangerous Goods Regulations (DGR) for the air transport (IATA) |
| ICAO | International Civil Aviation Organization |
| 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 |
| log KOW | n-octanol/water |
| MARPOL | International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant") |
| 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) |
| Skin Corr. | corrosive to skin |
| Skin Irrit. | irritant to skin |
| STEL | short-term exposure limit |
| TWA | time-weighted average |
| vPvB | very Persistent and very Bioaccumulative |
| WES | Safe Work Australia: Workplace exposure standards for airborne conatminants |

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Key literature references and sources for data

- UN Recommendations on the Transport of Dangerous Good
- Dangerous Goods Regulations (DGR) for the air transport (IATA)
- International Maritime Dangerous Goods Code (IMDG)

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

| Code | Text |
|------|---|
| H225 | highly flammable liquid and vapour |
| H226 | flammable liquid and vapour |
| H290 | may be corrosive to metals |
| H314 | causes severe skin burns and eye damage |
| H318 | causes serious eye damage |
| H319 | causes serious eye irritation |

Disclaimer

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