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

### 1.1 Product identifier

| | |
|---|---|
| Trade name | **blaugelb Reiniger PVC-S5 UVA** |
| Registration number (REACH) | not relevant (mixture) |
| Unique formula identifier (UFI) | N5ER-20PP-Y00G-QXVU |
| Article number | 0008458 |

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

Relevant identified uses: cleaning agent

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

Meesenburg GmbH & Co. KG
Westerallee 162
24941 Flensburg
Telephone: +49(0)4615808-2000
Telefax: +49(0)4615808-1101
e-mail: info@blaugelb.de
Website: www.meesenburg.de

e-mail (competent person)

Meesenburg GmbH & Co. KG
info@blaugelb.de

### 1.4 Emergency telephone number

Emergency information service

+49(0)89-19240
24 hours emergency information
-

## 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 |
|---|---|---|---|---|
| 2.6 | flammable liquid | 2 | Flam. Liq. 2 | H225 |
| 3.3 | serious eye damage/eye irritation | 2 | Eye Irrit. 2 | H319 |
| 3.8D | specific target organ toxicity - single exposure (narcotic effects, drowsiness) | 3 | STOT SE 3 | H336 |
| 4.1C | hazardous to the aquatic environment - chronic hazard | 3 | Aquatic Chronic 3 | H412 |

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

The product is combustible and can be ignited by potential ignition sources. Spillage and fire water can cause pollution of watercourses.

### 2.2 Label elements

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

- Signal word: danger

- Pictograms

GHS02, GHS07

- Hazard statements

| | |
|---|---|
| H225 | Highly flammable liquid and vapour. |
| H319 | Causes serious eye irritation. |
| H336 | May cause drowsiness or dizziness. |
| H412 | Harmful to aquatic life with long lasting effects. |

- Precautionary statements

| | |
|---|---|
| P101 | If medical advice is needed, have product container or label at hand. |
| P102 | Keep out of reach of children. |
| P103 | Read carefully and follow all instructions. |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P233 | Keep container tightly closed. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P403+P235 | Store in a well-ventilated place. Keep cool. |
| P405 | Store locked up. |
| P501 | Dispose of contents/container in accordance with local/regional/national/international regulations. |

Additional labelling requirements

- Supplemental hazard information

| | |
|---|---|
| EUH066 | Repeated exposure may cause skin dryness or cracking. |

| | |
|---|---|
| Tactile warning of danger | yes |
| - Hazardous ingredients for labelling | Butanone, Ethyl acetate, Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane |

## 2.3 Other hazards

Results of PBT and vPvB assessment

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

Endocrine disrupting properties

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

# 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 | Specific Conc. Limits | M-Factors |
|---|---|---|---|---|---|---|
| Butanone | CAS No 78-93-3<br><br>EC No 201-159-0<br><br>Index No 606-002-00-3<br><br>REACH Reg. No | 75 – < 90 | Flam. Liq. 2 / H225<br>Eye Irrit. 2 / H319<br>STOT SE 3 / H336 |  | | |

| Name of substance | Identifier | Wt% | Classification acc. to GHS | Pictograms | Specific Conc. Limits | M-Factors |
|---|---|---|---|---|---|---|
| | 01-2119457290-43-xxxx | | | | | |
| Ethyl acetate | CAS No 141-78-6<br><br>EC No 205-500-4<br><br>Index No 607-022-00-5<br><br>REACH Reg. No 01-2119475103-46-xxxx | 15 – < 20 | Flam. Liq. 2 / H225<br>Eye Irrit. 2 / H319<br>STOT SE 3 / H336 |  | | |
| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane | EC No 921-024-6<br><br>REACH Reg. No 01-2119475514-35-xxxx | 1 – < 5 | Flam. Liq. 2 / H225<br>Skin Irrit. 2 / H315<br>STOT SE 3 / H336<br>Asp. Tox. 1 / H304<br>Aquatic Acute 1 / H400<br>Aquatic Chronic 2 / H411 |  | | |
| Propan-2-ol | CAS No 67-63-0<br><br>EC No 200-661-7<br><br>Index No 603-117-00-0 | < 0.1 | Flam. Liq. 2 / H225<br>Eye Irrit. 2 / H319<br>STOT SE 3 / H336 |  | | |
| 2-(2H-benzotriazol-2-yl)-4,6-ditert-pentylphenol | CAS No 25973-55-1<br><br>EC No 247-384-8<br><br>REACH Reg. No 01-2119955688-17-xxxx | < 0.1 | STOT RE 2 / H373<br>Aquatic Chronic 4 / H413 |  | | |
| Isopentyl acetate | CAS No 123-92-2<br><br>EC No 204-662-3<br><br>Index No 607-130-00-2<br><br>REACH Reg. No 01-2119548408-32-xxxx | < 0.1 | Flam. Liq. 3 / H226 |  | | |

### Remarks

For full text of abbreviations: see SECTION 16

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still

and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

#### Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

#### Following skin contact

Wash with plenty of soap and water. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.

#### Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. If eye irritation persists: Get medical advice/attention.

#### Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice. Call a physician immediately.

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

Narcotic 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

Water spray, BC-powder, Carbon dioxide (CO2)

#### Unsuitable extinguishing media

Water jet

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

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

#### Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO2), Pyrolysis products, toxic

### 5.3 Advice for firefighters

Keep containers cool with water spray. In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Remove persons to safety. 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.

#### For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

### 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

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

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. Handling and storage: see section 7. 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

Recommendations

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

Use local and general ventilation. Avoidance of ignition sources. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use only in well-ventilated areas. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools.

- Specific notes/details

Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Vapours may form explosive mixtures with air.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

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

Managing of associated risks

- Explosive atmospheres

Keep container tightly closed and in a well-ventilated place. Use local and general ventilation. Keep cool. Protect from sunlight.

- Flammability hazards

Keep away from sources of ignition - No smoking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Protect from sunlight.

- Incompatible substances or mixtures

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

- Ventilation requirements

Use local and general ventilation. Ground/bond container and receiving equipment.

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to ADR) may be used.

### 7.3 Specific end use(s)

See section 16 for a general overview.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

| Country | Name of agent | CAS No | Identifier | TWA [ppm] | TWA [mg/m³] | STEL [ppm] | STEL [mg/m³] | Ceiling-C [ppm] | Ceiling-C [mg/m³] | Notation | Source |
|---|---|---|---|---|---|---|---|---|---|---|---|
| EU | isopentyl acetate | 123-92-2 | IOELV | 50 | 270 | 100 | 540 | | | | 2000/39/EC |
| EU | ethyl acetate | 141-78-6 | IOELV | 200 | 734 | 400 | 1,468 | | | | 2017/164/EU |
| EU | butanone | 78-93-3 | IOELV | 200 | 600 | 300 | 900 | | | | 2000/39/EC |

Notation

| | |
|---|---|
| Ceiling-C | ceiling value is a limit value above which exposure should not occur |
| STEL | short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified) |
| TWA | time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified) |

Relevant DNELs of components

| Name of substance | CAS No | Endpoint | Threshold level | Protection goal, route of exposure | Used in | Exposure time |
|---|---|---|---|---|---|---|
| Butanone | 78-93-3 | DNEL | 600 mg/m³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| Butanone | 78-93-3 | DNEL | 900 mg/m³ | human, inhalatory | worker (industry) | acute - systemic effects |
| Butanone | 78-93-3 | DNEL | 1,161 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |
| Butanone | 78-93-3 | DNEL | 106 mg/m³ | human, inhalatory | consumer (private households) | chronic - systemic effects |
| Butanone | 78-93-3 | DNEL | 450 mg/m³ | human, inhalatory | consumer (private households) | acute - systemic effects |
| Butanone | 78-93-3 | DNEL | 412 mg/kg bw/day | human, dermal | consumer (private households) | chronic - systemic effects |
| Butanone | 78-93-3 | DNEL | 31 mg/kg bw/day | human, oral | consumer (private households) | chronic - systemic effects |
| Ethyl acetate | 141-78-6 | DNEL | 734 mg/m³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| Ethyl acetate | 141-78-6 | DNEL | 1,468 mg/m³ | human, inhalatory | worker (industry) | acute - systemic effects |
| Ethyl acetate | 141-78-6 | DNEL | 734 mg/m³ | human, inhalatory | worker (industry) | chronic - local effects |
| Ethyl acetate | 141-78-6 | DNEL | 1,468 mg/m³ | human, inhalatory | worker (industry) | acute - local effects |
| Ethyl acetate | 141-78-6 | DNEL | 63 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |
| Ethyl acetate | 141-78-6 | DNEL | 367 mg/m³ | human, inhalatory | consumer (private households) | chronic - systemic effects |
| Ethyl acetate | 141-78-6 | DNEL | 734 mg/m³ | human, inhalatory | consumer (private households) | acute - systemic effects |
| Ethyl acetate | 141-78-6 | DNEL | 367 mg/m³ | human, inhalatory | consumer (private households) | chronic - local effects |
| Ethyl acetate | 141-78-6 | DNEL | 734 mg/m³ | human, inhalatory | consumer (private households) | acute - local effects |
| Ethyl acetate | 141-78-6 | DNEL | 37 mg/kg | human, dermal | consumer (private | chronic - systemic |

Relevant DNELs of components

| Name of substance | CAS No | Endpoint | Threshold level | Protection goal, route of exposure | Used in | Exposure time |
|---|---|---|---|---|---|---|
| | | | bw/day | | households) | effects |
| Ethyl acetate | 141-78-6 | DNEL | 4.5 mg/kg bw/day | human, oral | consumer (private households) | chronic - systemic effects |
| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane | | DNEL | 2,035 mg/m³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane | | DNEL | 773 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |
| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane | | DNEL | 608 mg/m³ | human, inhalatory | consumer (private households) | chronic - systemic effects |
| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane | | DNEL | 699 mg/kg bw/day | human, dermal | consumer (private households) | chronic - systemic effects |
| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane | | DNEL | 699 mg/kg bw/day | human, oral | consumer (private households) | chronic - systemic effects |
| Propan-2-ol | 67-63-0 | DNEL | 500 mg/m³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| Propan-2-ol | 67-63-0 | DNEL | 888 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |
| Propan-2-ol | 67-63-0 | DNEL | 89 mg/m³ | human, inhalatory | consumer (private households) | chronic - systemic effects |
| Propan-2-ol | 67-63-0 | DNEL | 319 mg/kg bw/day | human, dermal | consumer (private households) | chronic - systemic effects |
| Propan-2-ol | 67-63-0 | DNEL | 26 mg/kg bw/day | human, oral | consumer (private households) | chronic - systemic effects |
| 2-(2H-benzotriazol-2-yl)-4,6-ditertpentyl-phenol | 25973-55-1 | DNEL | 0.7 mg/m³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| 2-(2H-benzotriazol-2-yl)-4,6-ditertpentyl-phenol | 25973-55-1 | DNEL | 0.3 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |
| 2-(2H-benzotriazol-2-yl)-4,6-ditertpentyl-phenol | 25973-55-1 | DNEL | 0.17 mg/m³ | human, inhalatory | consumer (private households) | chronic - systemic effects |
| 2-(2H-benzotriazol-2-yl)-4,6-ditertpentyl-phenol | 25973-55-1 | DNEL | 0.14 mg/kg bw/day | human, dermal | consumer (private households) | chronic - systemic effects |
| 2-(2H-benzotriazol-2-yl)-4,6-ditertpentyl-phenol | 25973-55-1 | DNEL | 0.14 mg/kg bw/day | human, oral | consumer (private households) | chronic - systemic effects |

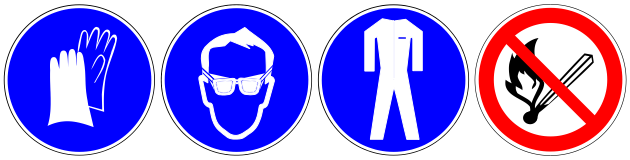
Relevant PNECs of components

| Name of substance | CAS No | Endpoint | Threshold level | Organism | Environmental compartment | Exposure time |
|---|---|---|---|---|---|---|
| Ethyl acetate | 141-78-6 | PNEC | 0.24 mg/l | aquatic organisms | freshwater | short-term (single instance) |
| Ethyl acetate | 141-78-6 | PNEC | 0.024 mg/l | aquatic organisms | marine water | short-term (single instance) |

Relevant PNECs of components

| Name of substance | CAS No | Endpoint | Threshold level | Organism | Environmental compartment | Exposure time |
|---|---|---|---|---|---|---|
| Ethyl acetate | 141-78-6 | PNEC | 650 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| Ethyl acetate | 141-78-6 | PNEC | 1.15 mg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| Ethyl acetate | 141-78-6 | PNEC | 0.115 mg/kg | aquatic organisms | marine sediment | short-term (single instance) |
| Ethyl acetate | 141-78-6 | PNEC | 0.148 mg/kg | terrestrial organisms | soil | short-term (single instance) |
| Propan-2-ol | 67-63-0 | PNEC | 140.9 mg/l | aquatic organisms | freshwater | short-term (single instance) |
| Propan-2-ol | 67-63-0 | PNEC | 140.9 mg/l | aquatic organisms | marine water | short-term (single instance) |
| Propan-2-ol | 67-63-0 | PNEC | 2,251 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| Propan-2-ol | 67-63-0 | PNEC | 552 mg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| Propan-2-ol | 67-63-0 | PNEC | 552 mg/kg | aquatic organisms | marine sediment | short-term (single instance) |
| Propan-2-ol | 67-63-0 | PNEC | 28 mg/kg | terrestrial organisms | soil | short-term (single instance) |
| 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol | 25973-55-1 | PNEC | 0.01 mg/l | aquatic organisms | freshwater | short-term (single instance) |
| 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol | 25973-55-1 | PNEC | 0.001 mg/l | aquatic organisms | marine water | short-term (single instance) |
| 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol | 25973-55-1 | PNEC | 1 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol | 25973-55-1 | PNEC | 451 mg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol | 25973-55-1 | PNEC | 45.1 mg/kg | aquatic organisms | marine sediment | short-term (single instance) |
| 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol | 25973-55-1 | PNEC | 90 mg/kg | terrestrial organisms | soil | short-term (single instance) |

## 8.2 Exposure controls



Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection. (EN 166).

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. 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.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.
Wash hands thoroughly after handling.
Antistatic protective clothing.

Body protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Type: AX (gas filters and combined filters against low-boiling point organic compounds, colour code: Brown).

Environmental exposure controls

Use appropriate container to avoid environmental contamination. 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 | characteristic |
| Melting point/freezing point | not determined |
| Boiling point or initial boiling point and boiling range | 80 °C at 101.3 kPa |
| Flammability | flammable liquid in accordance with GHS criteria |
| Lower and upper explosion limit | 2.2 vol% - 11.5 vol% |
| Flash point | -4 °C at 1 atm |
| Auto-ignition temperature | >200 °C (auto-ignition temperature (liquids and gases)) |
| Decomposition temperature | not relevant |
| pH (value) | not determined |
| Kinematic viscosity | not determined |
| Dynamic viscosity | 0.4 mPa s |
| Solubility(ies) | not determined |

Partition coefficient

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

| | |
|---|---|
| Vapour pressure | not determined |

Density and/or relative density

| | |
|---|---|
| Density | not determined |
| Relative vapour density | information on this property is not available |

| | |
|---|---|
| Particle characteristics | not relevant (liquid) |

### 9.2 Other information

| | |
|---|---|
| Information with regard to physical hazard classes | there is no additional information |

Other safety characteristics

| | |
|---|---|
| Temperature class (EU, acc. to ATEX) | T3 (maximum permissible surface temperature on the equipment: 200°C) |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". The mixture contains reactive substance(s). Risk of ignition.

If heated:

Risk of ignition, Highly flammable

### 10.2 Chemical stability

See below "Conditions to avoid".

### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

### 10.4 Conditions to avoid

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

Hints to prevent fire or explosion

Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

### 10.5 Incompatible materials

Oxidisers, Pyrophoric solid, Pyrophoric liquid

### 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. 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.
GHS of the United Nations, annex 4: May be harmful if swallowed.

Acute toxicity of components

| Name of substance | CAS No | Exposure route | Endpoint | Value | Species |
|---|---|---|---|---|---|
| Butanone | 78-93-3 | oral | LD50 | 2,054 $^{mg}/_{kg}$ | rat |
| Ethyl acetate | 141-78-6 | dermal | LD50 | >20,000 $^{mg}/_{kg}$ | rabbit |
| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane | | inhalation: vapour | LC50 | >25.2 $^{mg}/_{l}$/4h | rat |
| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane | | dermal | LD50 | >2,800 – 3,100 $^{mg}/_{kg}$ | rat |
| 2-(2H-benzotriazol-2-yl)-4,6-ditert-pentylphenol | 25973-55-1 | oral | LD50 | >7,750 $^{mg}/_{kg}$ | rat |
| 2-(2H-benzotriazol-2-yl)-4,6-ditert-pentylphenol | 25973-55-1 | inhalation: dust/mist | LC50 | >0.4 $^{mg}/_{l}$/4h | rat |
| 2-(2H-benzotriazol-2-yl)-4,6-ditert-pentylphenol | 25973-55-1 | dermal | LD50 | >1,100 $^{mg}/_{kg}$ | rabbit |
| Isopentyl acetate | 123-92-2 | oral | LD50 | 7,410 $^{mg}/_{kg}$ | rabbit |
| Isopentyl acetate | 123-92-2 | dermal | LD50 | >5,000 $^{mg}/_{kg}$ | rabbit |

### Skin corrosion/irritation
Shall not be classified as corrosive/irritant to skin.

### Serious eye damage/eye irritation
Causes serious eye irritation.

### 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
May cause drowsiness or dizziness.

### 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.

### Other information
Repeated exposure may cause skin dryness or cracking.

## 11.2 Information on other hazards
There is no additional information.

# SECTION 12: Ecological information

## 12.1 Toxicity
Harmful to aquatic life with long lasting effects.

Aquatic toxicity (acute) of components

| Name of substance | CAS No | Endpoint | Value | Species | Exposure time |
|---|---|---|---|---|---|
| Butanone | 78-93-3 | LC50 | 2,973 mg/l | fish | 96 h |
| Butanone | 78-93-3 | EC50 | 308 mg/l | aquatic invertebrates | 48 h |
| Butanone | 78-93-3 | ErC50 | 1,220 mg/l | algae | 72 h |
| Ethyl acetate | 141-78-6 | LC50 | 230 mg/l | fish | 96 h |
| Ethyl acetate | 141-78-6 | EC50 | 220 mg/l | fish | 96 h |
| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane | | LL50 | >13.4 mg/l | rainbow trout (Oncorhynchus mykiss) | 96 h |
| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane | | LC50 | 0.11 mg/l | rainbow trout (Oncorhynchus mykiss) | 96 h |
| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane | | EL50 | ≥10 – ≤22 mg/l | daphnia magna | 24 h |
| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane | | EC50 | 0.64 mg/l | daphnia magna | 48 h |
| Propan-2-ol | 67-63-0 | LC50 | 10,000 mg/l | fish | 96 h |
| 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol | 25973-55-1 | LC50 | >100 mg/l | fish | 24 h |
| Isopentyl acetate | 123-92-2 | LC50 | 11.1 mg/l | fish | 96 h |
| Isopentyl acetate | 123-92-2 | EC50 | 47.5 mg/l | aquatic invertebrates | 24 h |
| Isopentyl acetate | 123-92-2 | ErC50 | >466 mg/l | algae | 72 h |

Aquatic toxicity (chronic) of components

| Name of substance | CAS No | Endpoint | Value | Species | Exposure time |
|---|---|---|---|---|---|
| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane | | EL50 | 1.6 mg/l | daphnia magna | 21 d |
| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane | | EC50 | 0.23 mg/l | daphnia magna | 21 d |

## 12.2 Persistence and degradability

Degradability of components

| Name of substance | CAS No | Process | Degradation rate | Time | Method | Source |
|---|---|---|---|---|---|---|
| Butanone | 78-93-3 | oxygen depletion | 70 % | 7 d | | ECHA |
| Ethyl acetate | 141-78-6 | oxygen depletion | 62 % | 5 d | | ECHA |
| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane | | oxygen depletion | 10.5 % | 15 d | | ECHA Chem |
| Propan-2-ol | 67-63-0 | oxygen depletion | 53 % | 5 d | | ECHA |
| 2-(2H-benzo- | 25973-55-1 | carbon dioxide | 8 % | 28 d | | ECHA |

| Degradability of components | | | | | | |
|---|---|---|---|---|---|---|
| **Name of substance** | **CAS No** | **Process** | **Degradation rate** | **Time** | **Method** | **Source** |
| triazol-2-yl)-4,6-ditertpentyl-phenol | | generation | | | | |
| Isopentyl acetate | 123-92-2 | DOC removal | 57.1 % | 28 d | | ECHA |

## 12.3 Bioaccumulative potential

Data are not available.

| Bioaccumulative potential of components | | | | |
|---|---|---|---|---|
| **Name of substance** | **CAS No** | **BCF** | **Log KOW** | **BOD5/COD** |
| Butanone | 78-93-3 | | 0.3 (40 °C) | |
| Ethyl acetate | 141-78-6 | 30 | 0.68 (pH value: 7, 25 °C) | |
| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane | | ≥26.26 – ≤315.7 | 2.96 – 3.78 (20 °C) | |
| 2-(2H-benzotriazol-2-yl)-4,6-ditert-pentylphenol | 25973-55-1 | | >6.5 (pH value: 6.4, 23 °C) | |
| Isopentyl acetate | 123-92-2 | 28.1 | 2.7 (35 °C) | |

## 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 ≥ 0,1%.

## 12.6 Endocrine disrupting properties

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

## 12.7 Other adverse effects

Data are not available.

# SECTION 13: Disposal considerations

## 13.1 Waste treatment methods

### Waste treatment-relevant information

Solvent reclamation/regeneration.

### Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

### Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

### Relevant provisions relating to waste

List of wastes

- Product

14 06 03* other solvents and solvent mixtures

### Remarks

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

## SECTION 14: Transport information

### 14.1 UN number or ID number

| | |
|---|---|
| ADR | UN 1993 |
| IMDG-Code | UN 1993 |
| ICAO-TI | UN 1993 |

### 14.2 UN proper shipping name

| | |
|---|---|
| ADR | FLAMMABLE LIQUID, N.O.S. |
| IMDG-Code | FLAMMABLE LIQUID, N.O.S. |
| ICAO-TI | Flammable liquid, n.o.s. |
| Technical name (hazardous ingredients) | Butanone, Ethyl acetate |

### 14.3 Transport hazard class(es)

| | |
|---|---|
| ADR | 3 |
| IMDG-Code | 3 |
| ICAO-TI | 3 |

### 14.4 Packing group

| | |
|---|---|
| ADR | II |
| IMDG-Code | II |
| ICAO-TI | II |

### 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.

#### Information for each of the UN Model Regulations

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

| | |
|---|---|
| Classification code | F1 |
| Danger label(s) | 3 |


| | |
|---|---|
| Special provisions (SP) | 274, 601, 640D |
| Excepted quantities (EQ) | E2 |
| Limited quantities (LQ) | 1 L |
| Transport category (TC) | 2 |
| Tunnel restriction code (TRC) | D/E |
| Hazard identification No | 33 |

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

| | |
|---|---|
| Marine pollutant | - |
| Danger label(s) | 3 |

| | |
|---|---|
| Special provisions (SP) | 274 |
| Excepted quantities (EQ) | E2 |
| Limited quantities (LQ) | 1 L |
| EmS | F-E, S-E |
| Stowage category | B |

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

| | |
|---|---|
| Danger label(s) | 3 |

| | |
|---|---|
| Special provisions (SP) | A3 |
| Excepted quantities (EQ) | E2 |
| 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 |
|---|---|---|---|---|
| blaugelb Reiniger PVC-S5 UVA | this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC | | R3 | 3 |
| Isopentyl acetate | flammable / pyrophoric | | R40 | 40 |
| Butanone | flammable / pyrophoric | | R40 | 40 |
| Propan-2-ol | flammable / pyrophoric | | R40 | 40 |
| Propan-2-ol | substances in tattoo inks and permanent make-up | | R75 | 75 |
| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane | flammable / pyrophoric | | R40 | 40 |
| Ethyl acetate | flammable / pyrophoric | | R40 | 40 |
| Ethyl acetate | substances in tattoo inks and permanent make-up | | R75 | 75 |

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:

Legend

— 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.';

R40 1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:
- metallic glitter intended mainly for decoration,
- artificial snow and frost,
- 'whoopee' cushions,
- silly string aerosols,
- imitation excrement,
- horns for parties,
- decorative flakes and foams,
- artificial cobwebs,
- stink bombs.
2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with:
'For professional users only'.
3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/324/EEC (2).
4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.

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

Legend

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;
(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

not relevant

## Deco-Paint Directive

| | |
|---|---|
| VOC content | 100 % |

## Industrial Emissions Directive (IED)

| | |
|---|---|
| VOC content | <100 % |

## 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

## Regulation on persistent organic pollutants (POP)

none of the ingredients are listed

## Restrictions of occupation

Directive 94/33/EC on the protection of young people at work / Observe national regulations on protection of young people at work.

### National inventories

| Country | Inventory | Status |
|---|---|---|
| EU | REACH Reg. | not all ingredients are listed |

Legend

REACH Reg. REACH registered substances

## 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 |
|---|---|
| 2000/39/EC | Commission Directive establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC |
| 2017/164/EU | Commission Directive establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU |
| ADR | Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road) |
| Aquatic Acute | Hazardous to the aquatic environment - acute hazard |
| Aquatic Chronic | Hazardous to the aquatic environment - chronic hazard |
| Asp. Tox. | Aspiration hazard |
| BCF | Bioconcentration factor |
| BOD | Biochemical Oxygen Demand |
| CAS | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances) |
| Ceiling-C | Ceiling value |
| CLP | Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures |
| COD | Chemical oxygen demand |
| DGR | Dangerous Goods Regulations (see IATA/DGR) |
| DNEL | Derived No-Effect Level |
| 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 |
| EL50 | Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce a response in 50% of the test organisms |
| 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 |

| 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 |
| 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 |
| 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 |
| LL50 | Lethal Loading 50 %: the LL50 corresponds to the loading rate causing 50 % lethality |
| log KOW | n-Octanol/water |
| NLP | No-Longer Polymer |
| PBT | Persistent, Bioaccumulative and Toxic |
| PNEC | Predicted No-Effect Concentration |
| ppm | Parts per million |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals |
| Skin Corr. | Corrosive to skin |
| Skin Irrit. | Irritant to skin |
| STEL | Short-term exposure limit |
| STOT RE | Specific target organ toxicity - repeated exposure |
| STOT SE | Specific target organ toxicity - single exposure |
| SVHC | Substance of Very High Concern |
| TWA | Time-weighted average |
| VOC | Volatile Organic Compounds |
| vPvB | Very Persistent and very Bioaccumulative |

## 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). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

## Classification procedure

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

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

| Code | Text |
|---|---|
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H336 | May cause drowsiness or dizziness. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |
| H413 | May cause long lasting harmful effects to aquatic life. |

## Disclaimer

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