

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Product Reference code:according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 SDS Ref. (EU): WELDCAL-SDS

Issue date: 24/02/2015 Revision date: 18/08/2020 Supersedes version of: 20/08/2019 Version: 4.0

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

#### 1.1. Product identifier

Product form : Mixture

Trade name : WELD #2 WELD-THROUGH COPPER RICH PRIMER AEROSOL

Product code : WELDC/AL
Vaporizer : aerosol
Product group : aerosol

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

#### 1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use

Use of the substance/mixture : Coatings and paints, thinners, paint removers

Function or use category : Primer

#### 1.2.2. Uses advised against

No additional information available

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

Manufacturer Importer

U-POL Limited Ltd U-POL Netherlands B.V. B.V.

Denington Road Hoorgoorddreef 15
GB- NN8 2QH Wellingborough - Northamptonshire NL- 1101BA Amsterdam

United Kingdom Netherlands

T +44 (0) 1933 230310 T +31 20 240 2216

technicalsupport@u-pol.com - www.u-pol.com technicalsupport@u-pol.com - www.u-pol.com technicalsupport@u-pol.com

#### 1.4. Emergency telephone number

Emergency number : CHEMTREC: +44 (0) 870 8200418 (24 hrs)

| Country        | Organisation/Company                                     | Address                                  | Emergency number   | Comment   |
|----------------|--|--|--|---|
| Ireland        | National Poisons Information Centre<br>Beaumont Hospital | PO Box 1297<br>Beaumont Road<br>9 Dublin | +353 1 809 2566<br>(Healthcare professionals-<br>24/7)<br>+353 1 809 2166 (public,<br>8am - 10pm, 7/7) |   |
| United Kingdom | NHS<br>England, Scotland & Wales                         | -  | Call 111 or a Doctor   | In Northern Ireland,<br>contact your local GP<br>or pharmacist during<br>normal hours<br>(www.gpoutofhours.h<br>scni.net) |

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Aerosol, Category 1 H222;H229
Serious eye damage/eye irritation, Category 1 H318
Specific target organ toxicity — Single exposure, Category 3, Narcosis H336

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Hazardous to the aquatic environment — Chronic Hazard, Category 3

H412

Full text of H- and EUH-statements: see section 16

#### Adverse physicochemical, human health and environmental effects

Pressurised container: May burst if heated. Extremely flammable aerosol. May cause drowsiness or dizziness. Causes serious eye damage. Harmful to aquatic life with long lasting effects.

#### 2.2. Label elements

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

Hazard pictograms (CLP)







GHS02

GHS05

GHS07

Signal word (CLP) : Danger

Contains : 1-butanol, acetone

Hazard statements (CLP) : H222 - Extremely flammable aerosol.

H229 - Pressurised container: May burst if heated.

H318 - Causes serious eye damage. H336 - May cause drowsiness or dizziness.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, open flames, sparks. — No smoking.

> P211 - Do not spray on an open flame or other ignition source. P251 - Pressurized container: Do not pierce or burn, even after use.

P261 - Avoid breathing vapours, fume.

P280 - Wear eye protection, protective clothing, protective gloves.

P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a

P312 - Call a POISON CENTER or doctor/physician if you feel unwell.

P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

**EUH-statements** : EUH066 - Repeated exposure may cause skin dryness or cracking.

Unknown acute toxicity (CLP) - SDS 1.78% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)

1.78% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 4.66% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation

(Vapours))

#### 2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

| Component                       |  |
|---------------------------------|--|
| dimethyl ether (115-10-6)       | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |
| acetone (67-64-1)               | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |
| 1-methoxy-2-propanol (107-98-2) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |
| 1-butanol (71-36-3)             | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |

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| Component                               |  |
|---|--|
| trizinc bis(orthophosphate) (7779-90-0) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

#### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

| Name   | Product identifier  | %       | Classification according to<br>Regulation (EC) No. 1272/2008<br>[CLP]  |
|--|---|---------|--|
| dimethyl ether<br>substance with a Community workplace exposure limit<br>(Note U)              | CAS-No.: 115-10-6<br>EC-No.: 204-065-8<br>EC Index-No.: 603-019-00-8<br>REACH-no: 01-2119472128-<br>37  | 25 – 50 | Flam. Gas 1A, H220<br>Press. Gas (Liq.), H280  |
| acetone substance with a Community workplace exposure limit                                    | CAS-No.: 67-64-1<br>EC-No.: 200-662-2<br>EC Index-No.: 606-001-00-8<br>REACH-no: 01-2119471330-         | 25 – 50 | Flam. Liq. 2, H225<br>Eye Irrit. 2, H319<br>STOT SE 3, H336  |
| 1-methoxy-2-propanol substance with a Community workplace exposure limit                       | CAS-No.: 107-98-2<br>EC-No.: 203-539-1<br>EC Index-No.: 603-064-00-3<br>REACH-no: 01-2119457435-<br>35  | 3 – 10  | Flam. Liq. 3, H226<br>STOT SE 3, H336  |
| 1-butanol  | CAS-No.: 71-36-3<br>EC-No.: 200-751-6<br>EC Index-No.: 603-004-00-6<br>REACH-no: 01-2119484630-<br>28   | 3 – 5   | Flam. Liq. 3, H226<br>Acute Tox. 4 (Oral), H302<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>STOT SE 3, H336<br>STOT SE 3, H335                 |
| copper flakes (coated with aliphatic acid) substance with a Community workplace exposure limit | CAS-No.: 7440-50-8<br>EC-No.: 231-159-6   | < 5     | Acute Tox. 4 (Oral), H302<br>Acute Tox. 3 (Inhalation:dust,mist), H331<br>Eye Irrit. 2, H319<br>Aquatic Acute 1, H400<br>Aquatic Chronic 2, H411 |
| trizinc bis(orthophosphate)  | CAS-No.: 7779-90-0<br>EC-No.: 231-944-3<br>EC Index-No.: 030-011-00-6<br>REACH-no: 01-2119485044-<br>40 | 1 – 2.5 | Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410   |

Note U (Table 3): When put on the market gases have to be classified as 'Gases under pressure', in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case.

Product subject to CLP Article 1.1.3.7. The disclosure rules of the components is modified in this case.

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Full text of H- and EUH-statements: see section 16

#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects : May cause drowsiness or dizziness.

Symptoms/effects after skin contact : Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact : Serious damage to eyes.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

#### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

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

Fire hazard : Extremely flammable aerosol.

Explosion hazard : Pressurised container: May burst if heated.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

Protective equipment : Safety glasses. Protective clothing. Gloves.

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing

vapours, fume, spray. Avoid contact with skin and eyes.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

For containment : Contain released product. Collect spillage.

Methods for cleaning up : Mechanically recover the product.

Other information : Dispose of materials or solid residues at an authorized site.

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#### 6.4. Reference to other sections

For further information refer to section 13.

#### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Use only outdoors or in a well-ventilated area. Avoid breathing vapours, fume, spray. Avoid contact with skin and eyes. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product.

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

Storage conditions : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store locked

up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Storage temperature : < 25 °C

Special rules on packaging : Keep only in original container.

#### 7.3. Specific end use(s)

No additional information available

### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

| acetone (67-64-1)                                  |   |  |
|--|---|--|
| EU - Indicative Occupational Exposure Limit (IOEL) |   |  |
| Local name   | Acetone   |  |
| IOEL TWA   | 1210 mg/m³  |  |
| IOEL TWA [ppm]                                     | 500 ppm   |  |
| Regulatory reference                               | COMMISSION DIRECTIVE 2000/39/EC   |  |
| Ireland - Occupational Exposure Limits             |   |  |
| Local name   | Acetone   |  |
| OEL TWA [1]  | 1210 mg/m³  |  |
| OEL TWA [2]  | 500 ppm   |  |
| Remark   | IOELV (Indicative Occupational Exposure Limit Values)   |  |
| Regulatory reference                               | Chemical Agents Code of Practice 2020   |  |
| Ireland - Biological limit values                  |   |  |
| Local name   | Acetone   |  |
| BLV  | 50 mg/l Parameter: acetone - Medium: urine - Sampling time: End of shift - Notations: Ns (Non-specific) |  |
| Regulatory reference                               | Biological Monitoring Guidelines (HSA, 2011)  |  |
| United Kingdom - Occupational Exposure Limits      |   |  |
| Local name   | Acetone   |  |
| WEL TWA (OEL TWA) [1]                              | 1210 mg/m³  |  |

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| WEL TWA (OEL TWA) [2]         500 ppm           WEL STEL (OEL STEL)         3620 mg/m³           WEL STEL (OEL STEL) [ppm]         1500 ppm           Regulatory reference         EH40/2006 (Fourth edition, 2020), HSE           1-butanol (71-36-3)         Feland - Occupational Exposure Limits           Local name         Butan-1-ol [r-Butyl alcohol]           QEL TWA [2]         20 ppm           Regulatory reference         Chemical Agents Code of Practice 2020           United Kingdom - Occupational Exposure Limits         Local name           WEL STEL (OEL STEL)         154 mg/m²           WEL STEL (OEL STEL) [ppm]         50 ppm           Remark         Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that demail absorption will leaf to systemic toxicity)           Regulatory reference         EH40/2006 (Fourth edition, 2020), HSE           dimethyl ether (115-10-6)         EU - Indicative Occupational Exposure Limit (FoEL)           Local name         Dimethyl ether           OEL TWA         1920 mg/m²           OEL TWA (ppm)         1000 ppm           Regulatory reference         COMMISSION DIRECTIVE 2000/39/EC           Local name         Dimethyl ether           OEL TWA [1]         1920 mg/m²           OEL TWA [2]         1000 ppm   | acetone (67-64-1)                                  |   |  |
|--|--|---|--|
| WEL STEL (OEL STEL) [ppm]   1500 ppm   | WEL TWA (OEL TWA) [2]                              | 500 ppm   |  |
| Regulatory reference EH40/2005 (Fourth edition, 2020), HSE  1-butanol (71-36-3)  Ireland - Occupational Exposure Limits  Local name Butan-1-ol [n-Butyl shorth]  Regulatory reference Chemical Agents Code of Practice 2020  United Kingdom - Occupational Exposure Limits  Local name Butan-1-ol  WEL STEL (OEL STEL) [pm] 50 pm  Remark Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)  Regulatory reference EH40/2005 (Fourth edition, 2020). HSE  dimethyl ether (115-10-6)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name Dimethylether  IOEL TWA 1920 (OKMISSION DIRECTIVE 2000/39/EC Ireland - Occupational Exposure Limits  Local name Dimethyl ether  OEL TWA [1] 1920 mg/m²  OEL TWA [2] 1000 ppm  Remark IOEL TYMA [2] 1000 ppm  Rem | WEL STEL (OEL STEL)                                | 3620 mg/m³  |  |
| Ireland - Occupational Exposure Limits   | WEL STEL (OEL STEL) [ppm]                          | 1500 ppm  |  |
| Ireland - Occupational Exposure Limits   | Regulatory reference                               | EH40/2005 (Fourth edition, 2020). HSE                 |  |
| Local name   Butan-1-ol [n-Butyl alcohol]   OEL TWA [2]   20 ppm   Regulatory reference   Chemical Agents Code of Practice 2020   United Kingdom - Occupational Exposure Limits   Local name   Butan-1-ol   WEL STEL (OEL STEL)   154 mg/m²   WEL Indicative Occupational Exposure Limit (IOEL)   Local name   Dimethylether   LOEL TWA   1920 mg/m²   1000 ppm   Regulatory reference   CoMMISSION DIRECTIVE 2000/38/EC   Ireland - Occupational Exposure Limits   Local name   Dimethyl ether   OEL TWA [1]   1920 mg/m²   OEL TWA [2]   1000 ppm   Remark   LOEL (Indicative Occupational Exposure Limit Values)   Regulatory reference   Chemical Agents Code of Practice 2020   United Kingdom - Occupational Exposure Limits   Local name   Dimethyl ether   WEL TWA (OEL TWA) [1]   766 mg/m²   WEL STEL (OEL STEL)   958 mg/m²   | 1-butanol (71-36-3)                                |   |  |
| OEL TWA [2] 20 ppm  Regulatory reference Chemical Agents Code of Practice 2020  United Kingdom - Occupational Exposure Limits  Local name Butan-1-ol  WEL STEL (OEL STEL) [ppm] 50 ppm  Remark Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)  Regulatory reference EH40/2005 (Fourth edition, 2020). HSE  dimethyl ether (115-10-6)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name Dimethyl ether  IDEL TWA 1920 mg/m³  IOEL TWA 1920 mg/m³  IOEL TWA 1920 mg/m³  OEL TWA 1911 1920 m | Ireland - Occupational Exposure Limits             |   |  |
| Regulatory reference Chemical Agents Code of Practice 2020  United Kingdom - Occupational Exposure Limits  Local name Butan-1-ol  WEL STEL (OEL STEL) 154 mg/m²  WEL STEL (OEL STEL) 550 ppm  Remark Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)  Regulatory reference EH40/2005 (Fourth edition, 2020). HSE  dimethyl ether (115-10-6)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name Dimethylether  IOEL TWA 1920 mg/m³  IOEL TWA 1920 mg/m³  IOEL TWA 1920 mg/m³  OEL TWA 191 1920 mg/m³   | Local name   | Butan-1-ol [n-Butyl alcohol]                          |  |
| United Kingdom - Occupational Exposure Limits  Local name Butan-1-ol  WEL STEL (OEL STEL) 154 mg/m³  WEL STEL (OEL STEL) [ppm] 50 ppm  Remark Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)  Regulatory reference EH40/2005 (Fourth edition, 2020). HSE  dimethyl ether (115-10-6)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name Dimethylether  IOEL TWA 1920 mg/m³  IOEL TWA [ppm] 1000 ppm  Regulatory reference COMMISSION DIRECTIVE 2000/39/EC  Ireland - Occupational Exposure Limits  Local name Dimethyl ether  OEL TWA [1] 1920 mg/m³  OEL TWA [2] 1000 ppm  Remark IOELV (Indicative Occupational Exposure Limit Values)  Regulatory reference Chemical Agents Code of Practice 2020  United Kingdom - Occupational Exposure Limits  Local name Dimethyl ether  WEL TWA (OEL TWA) [1] 766 mg/m³  WEL TWA (OEL TWA) [2] 400 ppm  WEL STEL (OEL STEL) 958 mg/m³  WEL STEL (OEL STEL) 958 mg/m³  WEL STEL (OEL STEL) [ppm] 500 ppm  Regulatory reference EH40/2005 (Fourth edition, 2020). HSE  1-methoxy-2-propanol (107-98-2)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name 1-Methoxypropanol-2  | OEL TWA [2]  | 20 ppm  |  |
| Local name Butan-1-ol  WEL STEL (OEL STEL) [54 mg/m²]  WEL STEL (OEL STEL) [59m] 50 ppm  Remark Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)  Regulatory reference EH40/2005 (Fourth edition, 2020). HSE  EU - Indicative Occupational Exposure Limit (IOEL)  Local name Dimethylether  IOEL TWA 1920 mg/m³  IOEL TWA [1] 1000 ppm  Regulatory reference COMMISSION DIRECTIVE 2000/39/EC  Ireland - Occupational Exposure Limits  Local name Dimethyl ether  OEL TWA [1] 1920 mg/m³  OEL TWA [2] 1000 ppm  Remark IOELV (Indicative Occupational Exposure Limit Values)  Regulatory reference Chemical Agents Code of Practice 2020  United Kingdom - Occupational Exposure Limits  Local name Dimethyl ether  WEL TWA (OEL TWA) [1] 766 mg/m³  WEL TWA (OEL TWA) [2] 400 ppm  WEL STEL (OEL STEL) 958 mg/m³  WEL STEL (OEL STEL) 958 mg/m³  WEL STEL (OEL STEL) [500 ppm  Regulatory reference EH40/2005 (Fourth edition, 2020). HSE  I-methoxy-2-propanol (107-98-2)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name I-Methoxypropanol-2  | Regulatory reference                               | Chemical Agents Code of Practice 2020                 |  |
| WEL STEL (OEL STEL)  154 mg/m³  WEL STEL (OEL STEL) [ppm]  50 ppm  Remark  Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)  Regulatory reference  EH40/2005 (Fourth edition, 2020). HSE  dimethyl ether (115-10-6)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name  Dimethylether  IOEL TWA  IOEL TWA [1]  IOEL TWA [1]  IOEL TWA [1]  IOEL TWA [1]  IOEL TWA [2]  Regulatory reference  Chemical Agents Code of Practice 2020  United Kingdom - Occupational Exposure Limits  Local name  Dimethyl ether  IOEL TWA [2]  IOO0 ppm  Regulatory reference  Chemical Agents Code of Practice 2020  United Kingdom - Occupational Exposure Limits  Local name  Dimethyl ether  Dimethyl ether  IOEL TWA [2]  IOO0 ppm  Regulatory reference  Chemical Agents Code of Practice 2020  United Kingdom - Occupational Exposure Limits  Local name  Dimethyl ether  Well TWA (OEL TWA) [1]  Well TWA (OEL TWA) [2]  Well TWA (OEL TWA) [2]  Well STEL (OEL STEL)  958 mg/m³  Well STEL (OEL STEL)  1-methoxy-2-propanol (107-98-2)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name  1-Methoxypropanol-2  | United Kingdom - Occupational Exposure Limits      |   |  |
| WEL STEL (OEL STEL) [ppm] 50 ppm  Remark Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)  Regulatory reference EH40/2005 (Fourth edition, 2020). HSE  dimethyl ether (115-10-6)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name Dimethylether  IOEL TWA [ppm] 1000 ppm  Regulatory reference COMMISSION DIRECTIVE 2000/39/EC  Ireland - Occupational Exposure Limits  Local name Dimethyl ether  OEL TWA [1] 1920 mg/m³  OEL TWA [2] 1000 ppm  Remark IOEL V (Indicative Occupational Exposure Limit Values)  Regulatory reference Chemical Agents Code of Practice 2020  United Kingdom - Occupational Exposure Limits  Local name Dimethyl ether  WEL TWA (OEL TWA) [1] 766 mg/m³  WEL TWA (OEL TWA) [2] 400 ppm  WEL STEL (OEL STEL) 958 mg/m³  WEL STEL (OEL STEL) 958 mg/m³  WEL STEL (OEL STEL) [ppm] 500 ppm  Regulatory reference EH40/2005 (Fourth edition, 2020). HSE  1-methoxy-2-propanol (107-98-2)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name 1-Methoxypropanol-2   | Local name   | Butan-1-ol  |  |
| Remark Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)  Regulatory reference EH40/2005 (Fourth edition, 2020). HSE  dimethyl ether (115-10-6)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name Dimethylether  IOEL TWA 1920 mg/m³  IOEL TWA 1920 mg/m³  Regulatory reference COMMISSION DIRECTIVE 2000/39/EC  Ireland - Occupational Exposure Limits  Local name Dimethyl ether  OEL TWA [1] 1920 mg/m³  OEL TWA [2] 1000 ppm  Remark IOELV (Indicative Occupational Exposure Limit Values)  Regulatory reference Chemical Agents Code of Practice 2020  United Kingdom - Occupational Exposure Limits  Local name Dimethyl ether  WEL TWA (OEL TWA) [1] 766 mg/m³  WEL TWA (OEL TWA) [2] 400 ppm  WEL STEL (OEL STEL) 958 mg/m³  WEL STEL (OEL STEL) 958 mg/m³  WEL STEL (OEL STEL) [ppm] 500 ppm  Regulatory reference EH40/2005 (Fourth edition, 2020). HSE  1-methoxy-2-propanol (107-98-2)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name 1-Methoxypropanol-2   | WEL STEL (OEL STEL)                                | 154 mg/m³   |  |
| are concerns that dermal absorption will lead to systemic toxicity)  Regulatory reference EH40/2005 (Fourth edition, 2020). HSE  dimethyl ether (115-10-6)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name Dimethylether  IOEL TWA 1920 mg/m³  IOEL TWA (ppm) 1000 ppm  Regulatory reference COMMISSION DIRECTIVE 2000/39/EC  Ireland - Occupational Exposure Limits  Local name Dimethyl ether  OEL TWA [1] 1920 mg/m³  OEL TWA [2] 1000 ppm  Remark IOELV (Indicative Occupational Exposure Limit Values)  Regulatory reference Chemical Agents Code of Practice 2020  United Kingdom - Occupational Exposure Limits  Local name Dimethyl ether  WEL TWA (OEL TWA) [1] 766 mg/m³  WEL TWA (OEL TWA) [2] 400 ppm  WEL STEL (OEL STEL) 958 mg/m³  WEL STEL (OEL STEL) 958 mg/m³  WEL STEL (OEL STEL) 1000 ppm  Regulatory reference EH40/2005 (Fourth edition, 2020). HSE  1-methoxy-2-propanol (107-98-2)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name 1-Methoxypropanol-2   | WEL STEL (OEL STEL) [ppm]                          | 50 ppm  |  |
| dimethyl ether (115-10-6)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name  Dimethylether  IOEL TWA  1920 mg/m³  IOEL TWA [ppm]  Regulatory reference  COMMISSION DIRECTIVE 2000/39/EC  Ireland - Occupational Exposure Limits  Local name  Dimethyl ether  OEL TWA [1]  1920 mg/m³  OEL TWA [2]  Remark  IOELV (Indicative Occupational Exposure Limit Values)  Regulatory reference  Chemical Agents Code of Practice 2020  United Kingdom - Occupational Exposure Limits  Local name  Dimethyl ether  WEL TWA (OEL TWA) [1]  WEL TWA (OEL TWA) [2]  WEL STEL (OEL STEL)  958 mg/m³  WEL STEL (OEL STEL)  958 mg/m³  WEL STEL (OEL STEL) [ppm]  Regulatory reference  EH40/2005 (Fourth edition, 2020). HSE  1-methoxy-2-propanol (107-98-2)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name  1-Methoxypropanol-2   | Remark   | `   |  |
| EU- Indicative Occupational Exposure Limit (IOEL)  Local name    Dimethylether   | Regulatory reference                               | EH40/2005 (Fourth edition, 2020). HSE                 |  |
| Local name    Dimethylether  | dimethyl ether (115-10-6)                          |   |  |
| IOEL TWA 1920 mg/m³ IOEL TWA [ppm] 1000 ppm Regulatory reference COMMISSION DIRECTIVE 2000/39/EC Ireland - Occupational Exposure Limits Local name Dimethyl ether OEL TWA [1] 1920 mg/m³ OEL TWA [2] 1000 ppm Remark IOELV (Indicative Occupational Exposure Limit Values) Regulatory reference Chemical Agents Code of Practice 2020 United Kingdom - Occupational Exposure Limits Local name Dimethyl ether WEL TWA (OEL TWA) [1] 766 mg/m³ WEL TWA (OEL TWA) [2] 400 ppm WEL STEL (OEL STEL) 958 mg/m³ WEL STEL (OEL STEL) 958 mg/m³ Regulatory reference EH40/2005 (Fourth edition, 2020). HSE 1-methoxy-2-propanol (107-98-2) EU - Indicative Occupational Exposure Limit (IOEL) Local name 1-Methoxypropanol-2   | EU - Indicative Occupational Exposure Limit (IOEL) |   |  |
| DEL TWA [ppm]   1000 ppm   | Local name   | Dimethylether   |  |
| Regulatory reference COMMISSION DIRECTIVE 2000/39/EC  Ireland - Occupational Exposure Limits  Local name Dimethyl ether  OEL TWA [1] 1920 mg/m³  OEL TWA [2] 1000 ppm  Remark IOELV (Indicative Occupational Exposure Limit Values)  Regulatory reference Chemical Agents Code of Practice 2020  United Kingdom - Occupational Exposure Limits  Local name Dimethyl ether  WEL TWA (OEL TWA) [1] 766 mg/m³  WEL TWA (OEL TWA) [2] 400 ppm  WEL STEL (OEL STEL) 958 mg/m³  WEL STEL (OEL STEL) 958 mg/m³  WEL STEL (OEL STEL) [ppm] 500 ppm  Regulatory reference EH40/2005 (Fourth edition, 2020). HSE  1-methoxy-2-propanol (107-98-2)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name 1-Methoxypropanol-2  | IOEL TWA   | 1920 mg/m³  |  |
| Ireland - Occupational Exposure Limits  Local name Dimethyl ether  OEL TWA [1] 1920 mg/m³  OEL TWA [2] 1000 ppm  Remark IOELV (Indicative Occupational Exposure Limit Values)  Regulatory reference Chemical Agents Code of Practice 2020  United Kingdom - Occupational Exposure Limits  Local name Dimethyl ether  WEL TWA (OEL TWA) [1] 766 mg/m³  WEL TWA (OEL TWA) [2] 400 ppm  WEL STEL (OEL STEL) 958 mg/m³  WEL STEL (OEL STEL) 958 mg/m³  WEL STEL (OEL STEL) [ppm] 500 ppm  Regulatory reference EH40/2005 (Fourth edition, 2020). HSE  1-methoxy-2-propanol (107-98-2)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name 1-Methoxypropanol-2  | IOEL TWA [ppm]                                     | 1000 ppm  |  |
| Local name  Dimethyl ether  OEL TWA [1]  1920 mg/m³  OEL TWA [2]  1000 ppm  Remark  IOELV (Indicative Occupational Exposure Limit Values)  Regulatory reference  Chemical Agents Code of Practice 2020  United Kingdom - Occupational Exposure Limits  Local name  Dimethyl ether  WEL TWA (OEL TWA) [1]  766 mg/m³  WEL TWA (OEL TWA) [2]  400 ppm  WEL STEL (OEL STEL)  958 mg/m³  WEL STEL (OEL STEL) [ppm]  500 ppm  Regulatory reference  EH40/2005 (Fourth edition, 2020). HSE  1-methoxy-2-propanol (107-98-2)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name  1-Methoxypropanol-2   | Regulatory reference                               | COMMISSION DIRECTIVE 2000/39/EC                       |  |
| OEL TWA [1] 1920 mg/m³ OEL TWA [2] 1000 ppm  Remark IOELV (Indicative Occupational Exposure Limit Values) Regulatory reference Chemical Agents Code of Practice 2020  United Kingdom - Occupational Exposure Limits  Local name Dimethyl ether  WEL TWA (OEL TWA) [1] 766 mg/m³ WEL TWA (OEL TWA) [2] 400 ppm  WEL STEL (OEL STEL) 958 mg/m³ WEL STEL (OEL STEL) 958 mg/m³ WEL STEL (OEL STEL) [ppm] 500 ppm  Regulatory reference EH40/2005 (Fourth edition, 2020). HSE  1-methoxy-2-propanol (107-98-2)  EU - Indicative Occupational Exposure Limit (IOEL) Local name 1-Methoxypropanol-2   | Ireland - Occupational Exposure Limits             |   |  |
| OEL TWA [2] 1000 ppm  Remark IOELV (Indicative Occupational Exposure Limit Values)  Regulatory reference Chemical Agents Code of Practice 2020  United Kingdom - Occupational Exposure Limits  Local name Dimethyl ether  WEL TWA (OEL TWA) [1] 766 mg/m³  WEL TWA (OEL TWA) [2] 400 ppm  WEL STEL (OEL STEL) 958 mg/m³  WEL STEL (OEL STEL) 958 mg/m³  WEL STEL (OEL STEL) [ppm] 500 ppm  Regulatory reference EH40/2005 (Fourth edition, 2020). HSE  1-methoxy-2-propanol (107-98-2)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name 1-Methoxypropanol-2   | Local name   | Dimethyl ether  |  |
| Remark IOELV (Indicative Occupational Exposure Limit Values)  Regulatory reference Chemical Agents Code of Practice 2020  United Kingdom - Occupational Exposure Limits  Local name Dimethyl ether  WEL TWA (OEL TWA) [1] 766 mg/m³  WEL TWA (OEL TWA) [2] 400 ppm  WEL STEL (OEL STEL) 958 mg/m³  WEL STEL (OEL STEL) 958 mg/m³  Regulatory reference EH40/2005 (Fourth edition, 2020). HSE  1-methoxy-2-propanol (107-98-2)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name 1-Methoxypropanol-2  | OEL TWA [1]  | 1920 mg/m³  |  |
| Regulatory reference  Chemical Agents Code of Practice 2020  United Kingdom - Occupational Exposure Limits  Local name  Dimethyl ether  WEL TWA (OEL TWA) [1]  766 mg/m³  WEL TWA (OEL TWA) [2]  400 ppm  WEL STEL (OEL STEL)  958 mg/m³  WEL STEL (OEL STEL) [ppm]  Regulatory reference  EH40/2005 (Fourth edition, 2020). HSE  1-methoxy-2-propanol (107-98-2)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name  1-Methoxypropanol-2   | OEL TWA [2]  | 1000 ppm  |  |
| United Kingdom - Occupational Exposure Limits  Local name Dimethyl ether  WEL TWA (OEL TWA) [1] 766 mg/m³  WEL TWA (OEL TWA) [2] 400 ppm  WEL STEL (OEL STEL) 958 mg/m³  WEL STEL (OEL STEL) [ppm] 500 ppm  Regulatory reference EH40/2005 (Fourth edition, 2020). HSE  1-methoxy-2-propanol (107-98-2)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name 1-Methoxypropanol-2  | Remark   | IOELV (Indicative Occupational Exposure Limit Values) |  |
| Local name  Dimethyl ether  WEL TWA (OEL TWA) [1]  766 mg/m³  WEL TWA (OEL TWA) [2]  400 ppm  WEL STEL (OEL STEL)  958 mg/m³  WEL STEL (OEL STEL) [ppm]  Regulatory reference  EH40/2005 (Fourth edition, 2020). HSE  1-methoxy-2-propanol (107-98-2)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name  1-Methoxypropanol-2   | Regulatory reference                               | Chemical Agents Code of Practice 2020                 |  |
| WEL TWA (OEL TWA) [1]  WEL TWA (OEL TWA) [2]  WEL STEL (OEL STEL)  WEL STEL (OEL STEL) [ppm]  Regulatory reference  EH40/2005 (Fourth edition, 2020). HSE  1-methoxy-2-propanol (107-98-2)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name  1-Methoxypropanol-2  | United Kingdom - Occupational Exposure Limits      |   |  |
| WEL TWA (OEL TWA) [2]  WEL STEL (OEL STEL)  958 mg/m³  WEL STEL (OEL STEL) [ppm]  S00 ppm  Regulatory reference  EH40/2005 (Fourth edition, 2020). HSE  1-methoxy-2-propanol (107-98-2)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name  1-Methoxypropanol-2   | Local name   | Dimethyl ether  |  |
| WEL STEL (OEL STEL) 958 mg/m³  WEL STEL (OEL STEL) [ppm] 500 ppm  Regulatory reference EH40/2005 (Fourth edition, 2020). HSE  1-methoxy-2-propanol (107-98-2)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name 1-Methoxypropanol-2  | WEL TWA (OEL TWA) [1]                              | 766 mg/m³   |  |
| WEL STEL (OEL STEL) [ppm] 500 ppm  Regulatory reference EH40/2005 (Fourth edition, 2020). HSE  1-methoxy-2-propanol (107-98-2)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name 1-Methoxypropanol-2   | WEL TWA (OEL TWA) [2]                              | 400 ppm   |  |
| Regulatory reference EH40/2005 (Fourth edition, 2020). HSE  1-methoxy-2-propanol (107-98-2)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name 1-Methoxypropanol-2  | WEL STEL (OEL STEL)                                | 958 mg/m³   |  |
| 1-methoxy-2-propanol (107-98-2)  EU - Indicative Occupational Exposure Limit (IOEL)  Local name 1-Methoxypropanol-2  | WEL STEL (OEL STEL) [ppm]                          | 500 ppm   |  |
| EU - Indicative Occupational Exposure Limit (IOEL)  Local name 1-Methoxypropanol-2   | Regulatory reference                               | EH40/2005 (Fourth edition, 2020). HSE                 |  |
| Local name 1-Methoxypropanol-2   | 1-methoxy-2-propanol (107-98-2)                    |   |  |
|  | EU - Indicative Occupational Exposure Limit (IOEL) |   |  |
| IOEL TWA 375 mg/m³   | Local name   | 1-Methoxypropanol-2                                   |  |
|  | IOEL TWA   | 375 mg/m³   |  |

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| 1-methoxy-2-propanol (107-98-2)                    |   |  |
|--|---|--|
| IOEL TWA [ppm]                                     | 100 ppm   |  |
| IOEL STEL  | 568 mg/m³   |  |
| IOEL STEL [ppm]                                    | 150 ppm   |  |
| Remark   | Skin<br>Skin  |  |
| Regulatory reference                               | COMMISSION DIRECTIVE 2000/39/EC<br>COMMISSION DIRECTIVE 2000/39/EC  |  |
| Ireland - Occupational Exposure Limits             |   |  |
| Local name   | Propylene glycol monomethyl ether [1-Methyoxypropan2-ol]  |  |
| OEL TWA [1]  | 375 mg/m³   |  |
| OEL TWA [2]  | 100 ppm   |  |
| OEL STEL   | 568 mg/m³   |  |
| OEL STEL [ppm]                                     | 150 ppm   |  |
| Remark   | IOELV (Indicative Occupational Exposure Limit Values)   |  |
| Regulatory reference                               | Chemical Agents Code of Practice 2020   |  |
| United Kingdom - Occupational Exposure Limits      |   |  |
| Local name   | 1-Methoxypropan-2-ol  |  |
| WEL TWA (OEL TWA) [1]                              | 375 mg/m³   |  |
| WEL TWA (OEL TWA) [2]                              | 100 ppm   |  |
| WEL STEL (OEL STEL)                                | 560 mg/m³   |  |
| WEL STEL (OEL STEL) [ppm]                          | 150 ppm   |  |
| Remark   | Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity) |  |
| Regulatory reference                               | EH40/2005 (Fourth edition, 2020). HSE   |  |
| copper flakes (coated with aliphatic acid) (744    | <del>1</del> 0-50-8)  |  |
| EU - Indicative Occupational Exposure Limit (IOEL) |   |  |
| Local name   | Copper  |  |
| IOEL TWA   | 0.01 mg/m³ (respirable fraction)  |  |
| Remark   | (Year of adoption 2014)<br>(Year of adoption 2014)  |  |
| Regulatory reference                               | SCOEL Recommendations SCOEL Recommendations   |  |
| Ireland - Occupational Exposure Limits             |   |  |
| Local name   | Copper (as Cu)  |  |
| OEL TWA [1]  | 0.2 mg/m³ Fume<br>1 mg/m³ Dusts and mists   |  |
| Regulatory reference                               | Chemical Agents Code of Practice 2020   |  |
| United Kingdom - Occupational Exposure Limits      |   |  |
| Local name   | Copper  |  |
| WEL TWA (OEL TWA) [1]                              | 0.2 mg/m³ fume (as Cu)<br>1 mg/m³ and compounds, dusts and mists (as Cu)  |  |

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| copper flakes (coated with aliphatic acid) (7440-50-8) |  |
|--|--|
| WEL STEL (OEL STEL)                                    | 2 mg/m³ and compounds, dusts and mists (as Cu) |
| Regulatory reference                                   | EH40/2005 (Fourth edition, 2020). HSE          |

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Gloves. Protective clothing. Safety glasses.

#### Personal protective equipment symbol(s):







#### 8.2.2.1. Eye and face protection

#### Eye protection:

Safety glasses

#### 8.2.2.2. Skin protection

#### Skin and body protection:

Wear suitable protective clothing

#### Hand protection:

Protective gloves

#### Other skin protection

#### Materials for protective clothing:

Impermeable clothing

#### 8.2.2.3. Respiratory protection

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

#### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

#### **Environmental exposure controls:**

Avoid release to the environment.

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#### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid dark brown. Colour **Appearance** aerosol. Odour characteristic. Odour threshold Not available Melting point Not available Freezing point Not available **Boiling point** Not available

Flammability : Extremely flammable aerosol.

Explosive properties : Pressurised container: May burst if heated.

Explosive limits Not available Lower explosion limit : Not available Upper explosion limit : Not available : Not applicable Flash point : Not available Auto-ignition temperature Decomposition temperature : Not available рΗ : Not available Viscosity, kinematic : Not available

Solubility : Immiscible with water, soluble in most organic solvents.

Partition coefficient n-octanol/water (Log Kow) : Not available : Not available Vapour pressure Vapour pressure at 50 °C : Not available Density : 0.8 g/cm<sup>3</sup> Relative density : Not available Relative vapour density at 20 °C : Not available Particle size : Not applicable : Not applicable Particle size distribution : Not applicable Particle shape : Not applicable Particle aspect ratio : Not applicable Particle aggregation state : Not applicable Particle agglomeration state Particle specific surface area : Not applicable Particle dustiness : Not applicable

#### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

% of flammable ingredients : 89.1228403435596

9.2.2. Other safety characteristics

Gas group : Press. Gas (Liq.)

VOC content : 708 g/l

#### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Extremely flammable aerosol. Pressurised container: May burst if heated.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

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#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

#### **SECTION 11: Toxicological information**

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

| Acute toxicity (inhalation)              | : Not classified   |
|--|--|
| acetone (67-64-1)                        |  |
| LD50 oral rat                            | 5800 mg/kg bodyweight Animal: rat, Animal sex: female  |
| LD50 dermal rabbit                       | > 15800 mg/kg bodyweight (24 h, Rabbit, Male, Weight of evidence, Dermal, 14 day(s))                                       |
| LC50 Inhalation - Rat                    | 76 mg/l air Animal: rat, Animal sex: female, 95% CL: 65,2 - 88,4   |
| tert-butyl acetate (540-88-5)            |  |
| LD50 oral rat                            | 4500 mg/kg   |
| LD50 dermal rabbit                       | > 2000 mg/kg bodyweight Animal: rabbit, Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity)                                |
| LC50 Inhalation - Rat [ppm]              | 4211 ppm (6 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))                                    |
| 2-methylpropan-1-ol; iso-butanol (78-83- | 1)   |
| LD50 oral rat                            | > 2830 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male, Experimental value, Oral, 14 day(s))                    |
| LD50 dermal rabbit                       | > 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rabbit, Male, Experimental value, Dermal, 14 day(s))       |
| LC50 Inhalation - Rat                    | > 18.18 mg/l air (6 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))                            |
| LC50 Inhalation - Rat (Vapours)          | 24.6 mg/l/4h (Other, 4 h, Rat, Male/female, Experimental value, Inhalation (vapours))                                      |
| toluene (108-88-3)                       |  |
| LD50 oral rat                            | 5580 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: EU Method B.1 (Acute Toxicity (Oral)), 95% CL: 5300 - 5910 |
| LD50 dermal rabbit                       | > 5000 mg/kg bodyweight Animal: rabbit, Animal sex: male, 95% CL: 9,63 - 20,77   |
| LC50 Inhalation - Rat                    | 25.7 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male, Experimental value, Inhalation (vapours))                |
| LC50 Inhalation - Rat (Vapours)          | 25.7 mg/l/4h (Equivalent or similar to OECD 403, 4 h, Rat, Male, Experimental value, Inhalation (vapours))                 |
| phosphoric acid %, orthophosphoric a     | acid % (7664-38-2)   |
| LD50 oral rat                            | 301 mg/kg (OECD 423)   |
| LD50 dermal rabbit                       | 2750 mg/kg   |
| 1-butanol (71-36-3)                      |  |
| LD50 oral rat                            | ≈ 2292 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 401 (Acute Oral Toxicity)               |

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| LC50 Inhalation - Rat   402 (Acute Dermal Toxicity)  | 1-butanol (71-36-3)                                    | 1-butanol (71-36-3)   |  |  |
|--|--|---|--|--|
| yalue, Inhalation (appuny), 14 day(s))  phenol; carbolic acid; monohydroxybenzene; phenylalcohol (108-95-2)  LD50 oral rat  650 mg/kg (Equivalent or similar to OECD 401, Rat. Male, Experimental value, Oral, 14 day(s))  LD50 dermal rat  660 mg/kg (Equivalent or similar to OECD 402, 24 h, Rat, Female, Experimental value, Demail, 7 day(s))  amorphous silica (67762-90-7)  LD50 oral rat  5600 mg/kg (OECD Test Guideline 401, comparable product)  LD50 dermal rat  5600 mg/kg (OECD Test Guideline 402)  quartz (14808-60-7)  LD50 oral rat  5600 mg/kg (OECD Test Guideline 402)  quartz (14808-60-7)  LD50 oral rat  5600 mg/kg (OECD Test Guideline 402)  LD50 oral rat  5600 mg/kg (OECD Test Guideline 402)  LD50 oral rat  5600 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)  LC50 Inhalation - Rat [pm]  5640 mg/kg bodyweight (EU Method B.1 tris: Acute oral toxic - Acute toxic class method, Rat, Male / female, Experimental value, Oral, 14 day(s))  LD50 oral rat  4016 mg/kg bodyweight (EU Method B.1 tris: Acute oral toxic - Acute toxic class method, Rat, Male / female, Experimental value, Oral, 14 day(s))  LD50 oral rat  4016 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 402 (Acute Dermal Toxicity): Fixed Dose Method)  LD50 oral rat  4016 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Dermal Toxicity): Guideline: EU Method B.3 (Acute Toxicity (Dermali))  Copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat  500 mg/kg OECD Test Guideline 423, rat, male/female)  Copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat  500 mg/kg OECD Test Guideline 403, rat, male/female)  Copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat  500 mg/kg (OECD Test Guideline 403, rat, male/female)  Copper flakes (coated with aliphatic acid) (7440-50-8)  CC50 Inhalation - Rat  501 mg/kg (OECD Test Guideline 403, rat, male/female)  502 mg/kg (OECD Test Guideline 403, rat, male/female)  503 mg/kg (OECD Test | LD50 dermal rabbit                                     |   |  |  |
| LD50 oral rat  650 mg/kg (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral, 14 day(s))  LD50 dermal rat  660 mg/kg (Equivalent or similar to OECD 402, 24 h, Rat, Female, Experimental value, Dermal, 7 day(s))  amorphous sitica (67762-90-7)  LD50 oral rat  > 5000 mg/kg (OECD Test Guideline 401, comparable product)  LD50 dermal rat  > 5000 mg/kg (OECD Test Guideline 402)  quartz (14808-60-7)  LD50 oral rat  > 5000 mg/kg (OECD Test Guideline 402)  **Tetziac bis(orthophosphate) (7779-90-0)  LD50 oral rat  > 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)  LD50 oral rat  > 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)  dimethyl ether (115-10-6)  LC50 Inhalation - Rat [ppm]  164000 ppm Animal: rat, Animal sex: male, 95% CL: 142000 - 203000  1-methoxy-2-propanol (107-98-2)  LD50 oral rat  4016 mg/kg bodyweight (EU Method B.1 tris: Acute oral toxic - Acute toxic class method, Rat, Male / female, Experimental value, Oral, 14 day(s))  LD50 oral rat  4016 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 402 (Acute Oral Toxicity) - Fixed Dose Method)  LD50 oral rat  > 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 402 (Acute Oral Toxicity - Fixed Dose Method)  LD50 oral rat  > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat    500 mg/kg (OECD Test Guideline 423, rat, male/female)  LD50 dermal rat    500 mg/kg (OECD Test Guideline 423, rat, male/female)    500 mg/kg (OECD Test Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: OECD Guideline 403 (Acute Inhalation Toxicity: Acute Toxicity Clemal), Guideline: PPA OTS 798.1100 (Acute D | LC50 Inhalation - Rat                                  |   |  |  |
| LD50 dermal rat 60y(s))  BOO mg/kg (Equivalent or similar to OECD 402, 24 h, Rat, Female, Experimental value, Dermal, 7 day(s))  BOO oral rat > 5000 mg/kg (OECD Test Guideline 401, comparable product)  LD50 dermal rat > 2000 mg/kg (OECD Test Guideline 402)  Quartz (14808-60-7)  LD50 oral rat > 5000 mg/kg (OECD Test Guideline 402)  Quartz (14808-60-7)  LD50 oral rat > 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)  LD50 oral rat > 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)  LC50 Inhalation - Rat   25.41 mg/l/4h (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male/lemale, Read-across, Inhalation Rat (gust)  Glimethyl ether (115-10-6)  LC50 Inhalation - Rat [ppm]   164000 ppm Animal: rat, Animal sex: male, 95% CL: 142000 - 203000  1-methoxy-2-propanol (107-98-2)  LD50 oral rat   4016 mg/kg bodyweight (EU Method B.1 tris: Acute oral toxic - Acute toxic class method. Rat, Male / Iemaile, Experimental value, Oral, 14 day(s))  LD50 oral rat   13 g/kg  bisphenol-A-(epichlorhydrin), epoxy resin (25068-38-6)  LD50 oral rat   2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)  LD50 dermal rat   2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 420 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  Copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat   500 mg/kg Dodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  Copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat   500 mg/kg Dodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  Copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 Inhalation - Rat (Dust/Mist)   0.7 mg/l/4h (OECD Test Guideline 403, rat, male, inhalation (dust/mist) amines, hydrogenated tallow alkyl (61788-45-2)        | phenol; carbolic acid; monohydroxybenzene;             | phenylalcohol (108-95-2)  |  |  |
| Dermal, 7 day(s))  amorphous silica (67762-90-7)  LD50 oral rat   > 5000 mg/kg (OECD Test Guideline 401, comparable product)  - 2000 mg/kg (OECD Test Guideline 402)  quartz (14808-60-7)  LD50 oral rat   > 5000 mg/kg  trizinc bis(orthophosphate) (7779-90-0)  LD50 oral rat   > 5000 mg/kg  trizinc bis(orthophosphate) (7779-90-0)  LD50 oral rat   > 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)  LC50 Inhalation - Rat   > 5.41 mg/l/4h (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male/female, Read-across, Inhalation - Rat [pm]   164000 ppm Animal: rat, Animal sex: male, 95% CL: 142000 - 203000  1-methoxy-2-propanol (107-98-2)  LD50 oral rat   4016 mg/kg bodyweight (EU Method B.1 tris: Acute oral toxic - Acute toxic class method, Rat, Male / female, Experimental value, Oral, 14 day(s))  LD50 oral rat   2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)  LD50 oral rat   > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 420 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  Copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat   500 mg/kg Dodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  Copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat   500 mg/kg OeCD Test Guideline 423, rat, male/female)  - 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OTS 788.1100 (Acute Dermal Toxicity), Guideline: OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class Method)  LC50 Inhalation - Rat (Dust/Mist)   0.7 mg/l/4h (OECD Test Guideline 403, rat, male, inhalation (dust/mist) amines, hydrogenated tallow alkyl (61788-45-2)  | LD50 oral rat  |   |  |  |
| LD50 oral rat  | LD50 dermal rat  |   |  |  |
| LD50 dermal rat  > 2000 mg/kg (OECD Test Guideline 402)  quartz (14808-60-7)  LD50 oral rat  > 5000 mg/kg  trizinc bis(orthophosphate) (7779-90-0)  LD50 oral rat  > 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)  LC50 Inhalation - Rat  > 5.41 mg/l/dh (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male/female, Read-across, Inhalation (dust))  dimethyl ether (115-10-6)  LC50 Inhalation - Rat [ppm]  164000 ppm Animal: rat, Animal sex: male, 95% CL: 142000 - 203000  1-methoxy-2-propanol (107-98-2)  LD50 oral rat  4016 mg/kg bodyweight (EU Method B.1 tris: Acute oral toxic - Acute toxic class method, Rat, Male / female, Experimental value, Oral, 14 day(s))  LD50 dermal rat  13 g/kg  bisphenol-A-(epichlorhydrin), epoxy resin (25068-38-6)  LD50 oral rat  > 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat  500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat  500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat  500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat  500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat  500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity) (Guideline: EPA OTS 788.1100 (Acu | amorphous silica (67762-90-7)                          |   |  |  |
| quartz (14808-60-7)  LD50 oral rat   > 500 mg/kg    trizinc bis(orthophosphate) (7779-90-0)  LD50 oral rat   > 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)  LC50 Inhalation - Rat   > 5.41 mg/l/4h (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male/female, Read-across, Inhalation - Rat [pm]   164000 ppm Animal: rat, Animal sex: male, 95% CL: 142000 - 203000  1-methoxy-2-propanol (107-98-2)  LD50 oral rat   4016 mg/kg bodyweight (EU Method B.1 tris: Acute oral toxic - Acute toxic class method, Rat, Male / female, Experimental value, Oral, 14 day(s))  LD50 dermal rat   13 g/kg    bisphenol-A-(epichlorhydrin), epoxy resin (25068-38-6)  LD50 oral rat   > 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)    LD50 dermal rat   > 2000 mg/kg bodyweight Animal: rat, Guideline: DECD Guideline 420 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat   500 mg/kg Dodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat   500 mg/kg Dodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat   500 mg/kg Dodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat   500 mg/kg Dodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity) (Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: OECD Guideline 402 (Acute Dermal Toxicity) (Acute Dermal Toxicity), Guideline: OECD Guideli | LD50 oral rat  | > 5000 mg/kg (OECD Test Guideline 401, comparable product)                        |  |  |
| LD50 oral rat    S000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)   S000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)   S411 mg/l/4h (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male/female, Read-across, Inhalation - Rat   S411 mg/l/4h (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male/female, Read-across, Inhalation - Rat (ppm)   164000 ppm Animal: rat, Animal sex: male, 95% CL: 142000 - 203000   1-methoxy-2-propanol (107-98-2)   LD50 oral rat   | LD50 dermal rat  | > 2000 mg/kg (OECD Test Guideline 402)  |  |  |
| trizinc bis(orthophosphate) (7779-90-0)  LD50 oral rat   | quartz (14808-60-7)                                    |   |  |  |
| LD50 oral rat    5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)   5.41 mg/l/4h (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male/female, Read-across, Inhalation - Rat [pm]   164000 ppm Animal: rat, Animal sex: male, 95% CL: 142000 - 203000   1-methoxy-2-propanol (107-98-2)   LD50 oral rat   | LD50 oral rat  | > 500 mg/kg   |  |  |
| Toxicity)  LC50 Inhalation - Rat  > 5.41 mg/l/4h (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male/female, Read-across, Inhalation - Rat [ppm]  164000 ppm Animal: rat, Animal sex: male, 95% CL: 142000 - 203000  1-methoxy-2-propanol (107-98-2)  LD50 oral rat  4016 mg/kg bodyweight (EU Method B.1 tris: Acute oral toxic — Acute toxic class method, Rat, Male / female, Experimental value, Oral, 14 day(s))  LD50 dermal rat  13 g/kg  bisphenol-A-(epichlorhydrin), epoxy resin (25068-38-6)  LD50 oral rat  > 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)  LD50 dermal rat  > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 dermal rat  500 mg/kg (OECD Test Guideline 423, rat, male/female)  > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: CECD Guideline 402 (Acute Dermal Toxicity), Guideline: CECD Guideline 402 (Acute Dermal Toxicity), Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: CECD Guideline 402 (Acute Dermal Toxicity), Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Acute Toxic Class Method)  LC50 Inhalation - Rat (Dust/Mist)  0.7 mg/l/4h (OECD Test Guideline 403, rat, male, inhalation (dust/mist)  | trizinc bis(orthophosphate) (7779-90-0)                |   |  |  |
| Inhalation (dust))  dimethyl ether (115-10-6)  LC50 Inhalation - Rat [ppm] 164000 ppm Animal: rat, Animal sex: male, 95% CL: 142000 - 203000  1-methoxy-2-propanol (107-98-2)  LD50 oral rat 4016 mg/kg bodyweight (EU Method B.1 tris: Acute oral toxic – Acute toxic class method, Rat, Male / female, Experimental value, Oral, 14 day(s))  LD50 dermal rat 13 g/kg  bisphenol-A-(epichlorhydrin), epoxy resin (25068-38-6)  LD50 oral rat 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)  LD50 dermal rat 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 dermal rat 500 mg/kg (OECD Test Guideline 423, rat, male/female)  > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Guideline: OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class Method)  LC50 Inhalation - Rat 5.5.11 mg/l air Animal: rat, Guideline: OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class Method)  0.7 mg/l/4h (OECD Test Guideline 403, rat, male, inhalation (dust/mist)  amines, hydrogenated tallow alkyl (61788-45-2)  | LD50 oral rat  |   |  |  |
| LC50 Inhalation - Rat [ppm] 164000 ppm Animal: rat, Animal sex: male, 95% CL: 142000 - 203000  1-methoxy-2-propanol (107-98-2)  LD50 oral rat 4016 mg/kg bodyweight (EU Method B.1 tris: Acute oral toxic – Acute toxic class method, Rat, Male / female, Experimental value, Oral, 14 day(s))  LD50 dermal rat 13 g/kg  bisphenol-A-(epichlorhydrin), epoxy resin (25068-38-6)  LD50 oral rat 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)  LD50 dermal rat 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat 500 mg/kg (OECD Test Guideline 423, rat, male/female)  LD50 dermal rat 500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Guideline: other:MAFF 4200 (1985)  LC50 Inhalation - Rat 5.11 mg/l air Animal: rat, Guideline: OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class Method)  LC50 Inhalation - Rat (Dust/Mist) 0.7 mg/l/4h (OECD Test Guideline 403, rat, male, inhalation (dust/mist)  amines, hydrogenated tallow alkyl (61788-45-2)   | LC50 Inhalation - Rat                                  |   |  |  |
| 1-methoxy-2-propanol (107-98-2)  LD50 oral rat  4016 mg/kg bodyweight (EU Method B.1 tris: Acute oral toxic – Acute toxic class method, Rat, Male / female, Experimental value, Oral, 14 day(s))  LD50 dermal rat  13 g/kg  bisphenol-A-(epichlorhydrin), epoxy resin (25068-38-6)  LD50 oral rat  > 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)  LD50 dermal rat  > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat  500 mg/kg (OECD Test Guideline 423, rat, male/female)  > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Guideline: OECD Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Guideline: OECD Guideline: COECD Gu | dimethyl ether (115-10-6)                              |   |  |  |
| LD50 oral rat  4016 mg/kg bodyweight (EU Method B.1 tris: Acute oral toxic – Acute toxic class method, Rat, Male / female, Experimental value, Oral, 14 day(s))  LD50 dermal rat  13 g/kg  bisphenol-A-(epichlorhydrin), epoxy resin (25068-38-6)  LD50 oral rat  > 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)  LD50 dermal rat  > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat  500 mg/kg (OECD Test Guideline 423, rat, male/female)  > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Guideline: OECD Guideline 426 (Acute Inhalation Toxicity: Acute Toxic Class Method)  LC50 Inhalation - Rat (Dust/Mist)  0.7 mg/l/4h (OECD Test Guideline 403, rat, male, inhalation (dust/mist)  amines, hydrogenated tallow alkyl (61788-45-2)  | LC50 Inhalation - Rat [ppm]                            | 164000 ppm Animal: rat, Animal sex: male, 95% CL: 142000 - 203000                 |  |  |
| Rat, Male / female, Experimental value, Oral, 14 day(s))  LD50 dermal rat  13 g/kg  bisphenol-A-(epichlorhydrin), epoxy resin (25068-38-6)  LD50 oral rat  > 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)  LD50 dermal rat  > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat  500 mg/kg (OECD Test Guideline 423, rat, male/female)  LD50 dermal rat  > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Guideline: other:MAFF 4200 (1985)  LC50 Inhalation - Rat  > 5.11 mg/l air Animal: rat, Guideline: OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class Method)  LC50 Inhalation - Rat (Dust/Mist)  0.7 mg/l/4h (OECD Test Guideline 403, rat, male, inhalation (dust/mist)   | 1-methoxy-2-propanol (107-98-2)                        |   |  |  |
| bisphenol-A-(epichlorhydrin), epoxy resin (25068-38-6)  LD50 oral rat  > 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)  > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat  500 mg/kg (OECD Test Guideline 423, rat, male/female)  > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Guideline: other:MAFF 4200 (1985)  LC50 Inhalation - Rat  > 5.11 mg/l air Animal: rat, Guideline: OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class Method)  LC50 Inhalation - Rat (Dust/Mist)  0.7 mg/l/4h (OECD Test Guideline 403, rat, male, inhalation (dust/mist)   | LD50 oral rat  |   |  |  |
| LD50 oral rat  > 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)  > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat  500 mg/kg (OECD Test Guideline 423, rat, male/female)  LD50 dermal rat  > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Guideline: other:MAFF 4200 (1985)  LC50 Inhalation - Rat  > 5.11 mg/l air Animal: rat, Guideline: OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class Method)  LC50 Inhalation - Rat (Dust/Mist)  0.7 mg/l/4h (OECD Test Guideline 403, rat, male, inhalation (dust/mist)  amines, hydrogenated tallow alkyl (61788-45-2)  | LD50 dermal rat  | 13 g/kg   |  |  |
| 420 (Acute Oral Toxicity - Fixed Dose Method)  > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat  500 mg/kg (OECD Test Guideline 423, rat, male/female)  > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Guideline: other:MAFF 4200 (1985)  LC50 Inhalation - Rat  > 5.11 mg/l air Animal: rat, Guideline: OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class Method)  0.7 mg/l/4h (OECD Test Guideline 403, rat, male, inhalation (dust/mist)  amines, hydrogenated tallow alkyl (61788-45-2)  | bisphenol-A-(epichlorhydrin), epoxy resin (25          | 068-38-6)   |  |  |
| Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))  copper flakes (coated with aliphatic acid) (7440-50-8)  LD50 oral rat  500 mg/kg (OECD Test Guideline 423, rat, male/female)  > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Guideline: other:MAFF 4200 (1985)  LC50 Inhalation - Rat  > 5.11 mg/l air Animal: rat, Guideline: OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class Method)  LC50 Inhalation - Rat (Dust/Mist)  0.7 mg/l/4h (OECD Test Guideline 403, rat, male, inhalation (dust/mist)  amines, hydrogenated tallow alkyl (61788-45-2)   | LD50 oral rat  |   |  |  |
| LD50 oral rat  500 mg/kg (OECD Test Guideline 423, rat, male/female)  > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Guideline: other:MAFF 4200 (1985)  LC50 Inhalation - Rat  > 5.11 mg/l air Animal: rat, Guideline: OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class Method)  LC50 Inhalation - Rat (Dust/Mist)  0.7 mg/l/4h (OECD Test Guideline 403, rat, male, inhalation (dust/mist)  amines, hydrogenated tallow alkyl (61788-45-2)  | LD50 dermal rat  |   |  |  |
| LD50 dermal rat  > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Guideline: other:MAFF 4200 (1985)  LC50 Inhalation - Rat  > 5.11 mg/l air Animal: rat, Guideline: OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class Method)  LC50 Inhalation - Rat (Dust/Mist)  0.7 mg/l/4h (OECD Test Guideline 403, rat, male, inhalation (dust/mist)  amines, hydrogenated tallow alkyl (61788-45-2)   | copper flakes (coated with aliphatic acid) (7440-50-8) |   |  |  |
| Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Guideline: other:MAFF 4200 (1985)  LC50 Inhalation - Rat   | LD50 oral rat  | 500 mg/kg (OECD Test Guideline 423, rat, male/female)                             |  |  |
| Acute Toxic Class Method)  LC50 Inhalation - Rat (Dust/Mist)  0.7 mg/l/4h (OECD Test Guideline 403, rat, male, inhalation (dust/mist)  amines, hydrogenated tallow alkyl (61788-45-2)  | LD50 dermal rat  | Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OTS |  |  |
| amines, hydrogenated tallow alkyl (61788-45-2)   | LC50 Inhalation - Rat                                  | ,   |  |  |
|  | LC50 Inhalation - Rat (Dust/Mist)                      | 0.7 mg/l/4h (OECD Test Guideline 403, rat, male, inhalation (dust/mist)           |  |  |
| LD50 oral rat  | amines, hydrogenated tallow alkyl (61788-45-2)         |   |  |  |
| 2 2000 friging (OLOD Test Guideline 401, Tat)  | LD50 oral rat  | > 2000 mg/kg (OECD Test Guideline 401, rat)                                       |  |  |

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| Xylene (1330-20-7)                                       |   |
|--|---|
| LD50 oral rat  | 3523 mg/kg bodyweight (Equivalent or similar to EU Method B.1: Acute Toxicity (Oral), Rat, Male, Experimental value, Oral, 14 day(s))   |
| LD50 dermal rat  | 12126 mg/kg (Non-GLP, read-across from supporting substance, single dermal dose under occlusion followed by observation for 14 days)  |
| LD50 dermal rabbit                                       | 12126 mg/kg bodyweight Animal: rabbit, Animal sex: male   |
| LC50 Inhalation - Rat [ppm]                              | 6700 ppm/4h (EU Method B.2 (Acute Toxicity (Inhalation)), 4h, rat, male)  |
| decamethylcyclopentasiloxane (541-02-6)                  |   |
| LD50 oral rat  | > 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)  |
| LD50 dermal rabbit                                       | > 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)   |
| LC50 Inhalation - Rat                                    | 8.67 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EPA OTS 798.1150 (Acute Inhalation toxicity), 95% CL: 7,3 - 10,32  |
| ethylbenzene (100-41-4)                                  |   |
| LD50 oral rat  | 3500 mg/kg (Rat, Male / female, Experimental value, Oral, 14 day(s))  |
| LD50 dermal rabbit                                       | 15432 mg/kg bodyweight (24 h, Rabbit, Male, Experimental value, Dermal)   |
| LC50 Inhalation - Rat                                    | 17.8 mg/l (4 h, Rat, Male, Experimental value, Inhalation (vapours))  |
| Unknown acute toxicity (CLP) - SDS                       | <ul> <li>1.78% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)</li> <li>1.78% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)</li> <li>4.66% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))</li> </ul>   |
| Skin corrosion/irritation                                | : Not classified  |
| Serious eye damage/irritation                            | : Causes serious eye damage.  |
| Respiratory or skin sensitisation Germ cell mutagenicity | : Not classified<br>: Not classified  |
| Carcinogenicity  | : Not classified  |
| bisphenol-A-(epichlorhydrin), epoxy resin                |   |
| NOAEL (chronic, oral, animal/male, 2 years)              | 15 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: EPA OPPTS 870.4300 (Combined Chronic Toxicity / Carcinogenicity), Guideline: other:MITI, Japanese ministry of international trade and industry, February 1998, Remarks on results: other:Effect type: toxicity (migrated information)    |
| NOAEL (chronic, oral, animal/female, 2 years)            | 100 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: EPA OPPTS 870.4300 (Combined Chronic Toxicity / Carcinogenicity), Guideline: other:MITI, Japanese ministry of international trade and industry, February 1998, Remarks on results: other:Effect type: toxicity (migrated information) |
| Reproductive toxicity                                    | : Not classified  |
| acetone (67-64-1)  |   |
| LOAEL (animal/female, F0/P)                              | 11298 mg/kg bodyweight Animal: mouse, Animal sex: female  |
| NOAEL (animal/male, F0/P)                                | 900 mg/kg bodyweight Animal: rat, Animal sex: male, Remarks on results: other:Generation not specified (migrated information)   |
| phosphoric acid %, orthophosphoric ac                    | id % (7664-38-2)  |
| NOAEL (animal/male, F0/P)                                | > 500   |
| STOT-single exposure                                     | : May cause drowsiness or dizziness.  |

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| acetone (67-64-1)                          |   |
|--|---|
| STOT-single exposure                       | May cause drowsiness or dizziness.  |
| 2-methylpropan-1-ol; iso-butanol (78-83-1) |   |
| STOT-single exposure                       | May cause drowsiness or dizziness. May cause respiratory irritation.  |
| toluene (108-88-3)                         |   |
| STOT-single exposure                       | May cause drowsiness or dizziness.  |
| 1-butanol (71-36-3)                        |   |
| STOT-single exposure                       | May cause drowsiness or dizziness. May cause respiratory irritation.  |
| 2-methoxypropanol (1589-47-5)              |   |
| STOT-single exposure                       | May cause respiratory irritation.   |
| 1-methoxy-2-propanol (107-98-2)            |   |
| STOT-single exposure                       | May cause drowsiness or dizziness.  |
| Xylene (1330-20-7)                         |   |
| STOT-single exposure                       | May cause respiratory irritation.   |
| STOT-repeated exposure :                   | Not classified  |
| 2-methylpropan-1-ol; iso-butanol (78-83-1) |   |
| NOAEL (oral, rat, 90 days)                 | > 1450 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)  |
| toluene (108-88-3)                         |   |
| LOAEL (oral, rat, 90 days)                 | 1250 mg/kg bodyweight Animal: rat, Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)                    |
| NOAEL (oral, rat, 90 days)                 | 625 mg/kg bodyweight Animal: rat, Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)                     |
| NOAEC (inhalation, rat, vapour, 90 days)   | 2.355 mg/l air Animal: rat, Guideline: EU Method B.29 (Sub-Chronic Inhalation Toxicity:90-Day Study)  |
| STOT-repeated exposure                     | May cause damage to organs through prolonged or repeated exposure.  |
| phosphoric acid %, orthophosphoric acid .  | % (7664-38-2)   |
| NOAEL (oral, rat, 90 days)                 | 250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test) |
| 1-butanol (71-36-3)                        |   |
| LOAEL (oral, rat, 90 days)                 | 500 mg/kg bodyweight Animal: rat  |
| NOAEL (oral, rat, 90 days)                 | 125 mg/kg bodyweight Animal: rat  |
| phenol; carbolic acid; monohydroxybenzene; | phenylalcohol (108-95-2)  |
| LOAEL (dermal, rat/rabbit, 90 days)        | 260 mg/kg bodyweight Animal: rabbit   |
| NOAEL (dermal, rat/rabbit, 90 days)        | 130 mg/kg bodyweight Animal: rabbit   |
| STOT-repeated exposure                     | May cause damage to organs (central nervous system, skin, liver, kidneys) through prolonged or repeated exposure.   |
| 1-methoxy-2-propanol (107-98-2)            |   |
| LOAEL (oral, rat, 90 days)                 | 2757 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)                                    |

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| 1-methoxy-2-propanol (107-98-2)                 |   |  |
|---|---|--|
| NOAEL (oral, rat, 90 days)                      | 919 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)   |  |
| NOAEL (dermal, rat/rabbit, 90 days)             | > 1000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)  |  |
| amines, hydrogenated tallow alkyl (61788-45-    | 2)  |  |
| STOT-repeated exposure                          | May cause damage to organs through prolonged or repeated exposure.  |  |
| Xylene (1330-20-7)                              |   |  |
| LOAEL (oral, rat, 90 days)                      | 150 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents), Guideline: EPA OPP 82-1 (90-Day Oral Toxicity) |  |
| STOT-repeated exposure                          | May cause damage to organs through prolonged or repeated exposure.  |  |
| decamethylcyclopentasiloxane (541-02-6)         |   |  |
| NOAEL (oral, rat, 90 days)                      | ≥ 1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)  |  |
| NOAEL (dermal, rat/rabbit, 90 days)             | ≥ 1600 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)   |  |
| ethylbenzene (100-41-4)                         |   |  |
| NOAEL (oral, rat, 90 days)                      | 75 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-<br>Day Oral Toxicity in Rodents)  |  |
| STOT-repeated exposure                          | May cause damage to organs (hearing sense) through prolonged or repeated exposure.  |  |
| Aspiration hazard :                             | Not classified  |  |
| WELD #2 WELD-THROUGH COPPER RICH PRIMER AEROSOL |   |  |
| Vaporizer                                       | aerosol   |  |
|   |   |  |

#### 11.2. Information on other hazards

No additional information available

### **SECTION 12: Ecological information**

### 12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term : Not classified

(acute)

Hazardous to the aquatic environment, long-term : Harmful to aquatic life with long lasting effects.

(chronic)

| acetone (67-64-1)    |   |  |
|----------------------|---|--|
| LC50 - Fish [1]      | 6210 – 8120 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Measured concentration) |  |
| LOEC (chronic)       | > 79 mg/l Test organisms (species): Daphnia magna Duration: '21 d'  |  |
| NOEC (chronic)       | ≥ 79 mg/l Test organisms (species): Daphnia magna Duration: '21 d'  |  |
| 1-butanol (71-36-3)  |   |  |
| LC50 - Fish [1]      | 1376 mg/l Test organisms (species): Pimephales promelas   |  |
| EC50 - Crustacea [1] | 1328 mg/l Test organisms (species): Daphnia magna   |  |

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| 1-butanol (71-36-3)                     |  |  |
|---|--|--|
| ErC50 algae                             | 225 mg/l (OECD 201: Alga, Growth Inhibition Test, 96 h, Pseudokirchneriella subcapitata Static system, Fresh water, Experimental value, GLP) |  |
| NOEC (chronic)                          | 4.1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'  |  |
| NOEC chronic crustacea                  | 4.1 mg/l   |  |
| trizinc bis(orthophosphate) (7779-90-0) |  |  |
| LC50 - Fish [1]                         | 0.169 mg/l (ASTM E729-88, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Read-across, Nominal concentration)                         |  |
| dimethyl ether (115-10-6)               |  |  |
| LC50 - Fish [1]                         | > 4.1 g/l Test organisms (species): Poecilia reticulata  |  |
| EC50 - Crustacea [1]                    | > 4.4 g/l Test organisms (species): Daphnia magna  |  |
| EC50 96h - Algae [1]                    | 154.917 mg/l Test organisms (species): other:green algae   |  |
| 1-methoxy-2-propanol (107-98-2)         |  |  |
| LC50 - Fish [1]                         | ≥ 1000 mg/l (Equivalent or similar to OECD 203, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, Lethal)      |  |
| EC50 - Other aquatic organisms [1]      | 2954 mg/l Test organisms (species): other aquatic crustacea:Acartia tonsa  |  |
| ErC50 algae                             | > 1000 mg/l (7 day(s), Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)               |  |

## 12.2. Persistence and degradability

| ble in the soil under anaerobic conditions. Readily |  |  |
|---|--|--|
| ble in the soil under anaerobic conditions. Readily |  |  |
|   |  |  |
|   |  |  |
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|   |  |  |
|   |  |  |
|   |  |  |
| dimethyl ether (115-10-6)                           |  |  |
| biodegradable in water.                             |  |  |
| 1-methoxy-2-propanol (107-98-2)                     |  |  |
| dily biodegradable in water.                        |  |  |
|   |  |  |
|   |  |  |

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## 12.3. Bioaccumulative potential

| acetone (67-64-1)                               |  |  |
|---|--|--|
| Partition coefficient n-octanol/water (Log Pow) | -0.23 (Test data)  |  |
| Bioaccumulative potential                       | Not bioaccumulative.   |  |
| 1-butanol (71-36-3)                             |  |  |
| BCF - Other aquatic organisms [1]               | 3.162 l/kg (BCFBAF v3.01, Calculated value, Fresh weight)  |  |
| Partition coefficient n-octanol/water (Log Pow) | 1 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)    |  |
| Bioaccumulative potential                       | Low potential for bioaccumulation (Log Kow < 4).   |  |
| trizinc bis(orthophosphate) (7779-90-0)         |  |  |
| BCF - Other aquatic organisms [1]               | 116 – 60960 (21 day(s), Gammarus sp., Semi-static system, Salt water, Read-across, Fresh weight) |  |
| Bioaccumulative potential                       | High potential for bioaccumulation (BCF > 5000).   |  |
| dimethyl ether (115-10-6)                       |  |  |
| Partition coefficient n-octanol/water (Log Pow) | 0.1 (Experimental value)   |  |
| Bioaccumulative potential                       | Low potential for bioaccumulation (Log Kow < 4).   |  |
| 1-methoxy-2-propanol (107-98-2)                 |  |  |
| Partition coefficient n-octanol/water (Log Pow) | < 1 (Experimental value, Equivalent or similar to OECD 117, 20 °C)                               |  |
| Bioaccumulative potential                       | Low potential for bioaccumulation (Log Kow < 4).   |  |

## 12.4. Mobility in soil

| acetone (67-64-1)  |  |  |
|--|--|--|
| Surface tension  | 23300 mN/m (20 °C)   |  |
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 0.374 – 0.988 (log Koc, SRC PCKOCWIN v2.0, Calculated value)                         |  |
| Ecology - soil   | Highly mobile in soil.   |  |
| 1-butanol (71-36-3)  |  |  |
| Surface tension  | 69.9 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions)             |  |
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 0.54 (log Koc, SRC PCKOCWIN v2.0, Calculated value)                                  |  |
| Ecology - soil   | Highly mobile in soil. May be harmful to plant growth, blooming and fruit formation. |  |
| trizinc bis(orthophosphate) (7779-90-0)                    |  |  |
| Ecology - soil Adsorbs into the soil.                      |  |  |
| dimethyl ether (115-10-6)                                  |  |  |
| Surface tension  | No data available in the literature  |  |
| Ecology - soil   | Not applicable (gas).  |  |
| 1-methoxy-2-propanol (107-98-2)                            |  |  |
| Surface tension  | 70.7 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions)             |  |
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 0.152 (log Koc, SRC PCKOCWIN v2.0, Calculated value)                                 |  |

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| 1-methoxy-2-propanol (107-98-2) |                        |
|---------------------------------|------------------------|
| Ecology - soil                  | Highly mobile in soil. |

#### 12.5. Results of PBT and vPvB assessment

| Component                               |  |  |
|---|--|--|
| dimethyl ether (115-10-6)               | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |  |
| acetone (67-64-1)                       | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |  |
| 1-methoxy-2-propanol (107-98-2)         | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |  |
| 1-butanol (71-36-3)                     | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |  |
| trizinc bis(orthophosphate) (7779-90-0) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |  |

#### 12.6. Endocrine disrupting properties

No additional information available

#### 12.7. Other adverse effects

No additional information available

#### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

#### **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / ADN / RID

#### 14.1. UN number or ID number

 UN-No. (ADR)
 : UN 1950

 UN-No. (IMDG)
 : UN 1950

 UN-No. (IATA)
 : UN 1950

 UN-No. (ADN)
 : UN 1950

 UN-No. (RID)
 : UN 1950

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : AEROSOLS
Proper Shipping Name (IMDG) : AEROSOLS
Proper Shipping Name (IATA) : Aerosols, flammable
Proper Shipping Name (ADN) : AEROSOLS
Proper Shipping Name (RID) : AEROSOLS

Transport document description (ADR)

Transport document description (IMDG)

Transport document description (IMTA)

Transport document description (IATA)

Transport document description (ADN)

Transport document description (RID)

UN 1950 AEROSOLS, 2.1

UN 1950 AEROSOLS, 2.1

UN 1950 AEROSOLS, 2.1

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#### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR) : 2.1
Danger labels (ADR) : 2.1



#### **IMDG**

Transport hazard class(es) (IMDG) : 2.1
Danger labels (IMDG) : 2.1



#### IATA

Transport hazard class(es) (IATA) : 2.1
Danger labels (IATA) : 2.1



#### ADN

Transport hazard class(es) (ADN) : 2.1
Danger labels (ADN) : 2.1





#### RID

Transport hazard class(es) (RID) : 2.1
Danger labels (RID) : 2.1

.



#### 14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

#### 14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

#### 14.6. Special precautions for user

#### **Overland transport**

Classification code (ADR) : 5F

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Special provisions (ADR) : 190, 327, 344, 625

Limited quantities (ADR) : 1I
Excepted quantities (ADR) : E0
Packing instructions (ADR) : P207

Special packing provisions (ADR) : PP87, RR6, L2

Mixed packing provisions (ADR) : MP9
Transport category (ADR) : 2
Special provisions for carriage - Packages (ADR) : V14
Special provisions for carriage - Loading, unloading : CV9, CV12

and handling (ADR)

Special provisions for carriage - Operation (ADR) : S2 Tunnel restriction code (ADR) : D

#### Transport by sea

Special provisions (IMDG) : 63, 190, 277, 327, 344, 381, 959

Packing instructions (IMDG) : P207, LP200
Special packing provisions (IMDG) : PP87, L2
EmS-No. (Fire) : F-D
EmS-No. (Spillage) : S-U
Stowage category (IMDG) : None
Stowage and handling (IMDG) : SW1, SW22
Segregation (IMDG) : SG69

#### Air transport

PCA Excepted quantities (IATA) : E0
PCA Limited quantities (IATA) : Y203
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 203
PCA max net quantity (IATA) : 75kg
CAO packing instructions (IATA) : 203
CAO max net quantity (IATA) : 150kg

Special provisions (IATA) : A145, A167, A802

ERG code (IATA) : 10L

#### Inland waterway transport

Classification code (ADN) : 5F

Special provisions (ADN) : 190, 327, 344, 625

Limited quantities (ADN) : 1 L

Excepted quantities (ADN) : Equipment required (ADN) : PP, EX, A

Ventilation (ADN) : VE01, VE04

Number of blue cones/lights (ADN) : 1

#### Rail transport

Classification code (RID) : 5F

Special provisions (RID) : 190, 327, 344, 625

Limited quantities (RID) : 1L

Excepted quantities (RID) : E0

Packing instructions (RID) : P207, LP200

Special packing provisions (RID) : PP87, RR6, L2

Mixed packing provisions (RID) : MP9

Mixed packing provisions (RID) : MP9

Transport category (RID) : 2

Special provisions for carriage – Packages (RID) : W14

Special provisions for carriage - Loading, unloading : CW9, CW12

and handling (RID)

Colis express (express parcels) (RID) : CE2 Hazard identification number (RID) : 23

#### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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#### **SECTION 15: Regulatory information**

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

#### 15.1.1. EU-Regulations

| EU restriction list (REACH Annex XVII) |  |  |
|--|--|--|
| Reference code                         | Applicable on Entry title or description   |  |
| 3(a)                                   | WELD #2 WELD-<br>THROUGH COPPER<br>RICH PRIMER<br>AEROSOL; 1-methoxy-2-<br>propanol; 1-butanol;<br>acetone | Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F   |
| 3(b)                                   | WELD #2 WELD-<br>THROUGH COPPER<br>RICH PRIMER<br>AEROSOL; 1-methoxy-2-<br>propanol; 1-butanol;<br>acetone | Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10  |
| 3(c)                                   | WELD #2 WELD-<br>THROUGH COPPER<br>RICH PRIMER<br>AEROSOL  | Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1  |
| 40.                                    | 1-methoxy-2-propanol ; 1-<br>butanol ; acetone ;<br>dimethyl ether   | Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not. |

Contains no substance on the REACH candidate list ≥ 0,1 % / SCL

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

#### ANNEX II REPORTABLE EXPLOSIVES PRECURSORS

List of substances on their own or in mixtures or in substances for which suspicious transactions and significant disappearances and thefts are to be reported to the relevant national contact point within 24 hours.

| Name    | CAS-No. | Nomenclature | Combined Nomenclature code for mixture without constituents which would determine classification under another CN code |
|---------|---------|--------------|--|
| Acetone | 67-64-1 | 2914 11 00   | ex 3824 99 92  |

Please see https://ec.europa.eu/home-affairs/sites/default/files/what-we-do/policies/crisis-and-terrorism/explosives/explosives-precursors/docs/list\_of\_competent\_authorities\_and\_national\_contact\_points\_en.pdf

VOC content : 708 g/l

#### 15.1.2. National regulations

No additional information available

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

18/08/2020 (Revision date) EN (English) 20/22

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### **SECTION 16: Other information**

| Full text of H- and EUF             | H-statements:  |
|-------------------------------------|--|
| Acute Tox. 3 (Inhalation:dust,mist) | Acute toxicity (inhalation:dust,mist) Category 3                       |
| Acute Tox. 4 (Oral)                 | Acute toxicity (oral), Category 4                                      |
| Aerosol 1                           | Aerosol, Category 1  |
| Aquatic Acute 1                     | Hazardous to the aquatic environment — Acute Hazard, Category 1        |
| Aquatic Chronic 1                   | Hazardous to the aquatic environment — Chronic Hazard, Category 1      |
| Aquatic Chronic 2                   | Hazardous to the aquatic environment — Chronic Hazard, Category 2      |
| Aquatic Chronic 3                   | Hazardous to the aquatic environment — Chronic Hazard, Category 3      |
| EUH066                              | Repeated exposure may cause skin dryness or cracking.                  |
| Eye Dam. 1                          | Serious eye damage/eye irritation, Category 1                          |
| Eye Irrit. 2                        | Serious eye damage/eye irritation, Category 2                          |
| Flam. Gas 1A                        | Flammable gases, Category 1A   |
| Flam. Liq. 2                        | Flammable liquids, Category 2  |
| Flam. Liq. 3                        | Flammable liquids, Category 3  |
| H220                                | Extremely flammable gas.   |
| H222                                | Extremely flammable aerosol.   |
| H225                                | Highly flammable liquid and vapour.                                    |
| H226                                | Flammable liquid and vapour.   |
| H229                                | Pressurised container: May burst if heated.                            |
| H280                                | Contains gas under pressure; may explode if heated.                    |
| H302                                | Harmful if swallowed.  |
| H315                                | Causes skin irritation.  |
| H318                                | Causes serious eye damage.   |
| H319                                | Causes serious eye irritation.   |
| H331                                | Toxic if inhaled.  |
| H335                                | May cause respiratory irritation.                                      |
| H336                                | May cause drowsiness or dizziness.                                     |
| H400                                | Very toxic to aquatic life.  |
| H410                                | Very toxic to aquatic life with long lasting effects.                  |
| H411                                | Toxic to aquatic life with long lasting effects.                       |
| H412                                | Harmful to aquatic life with long lasting effects.                     |
| Press. Gas (Liq.)                   | Gases under pressure : Liquefied gas                                   |
| Skin Irrit. 2                       | Skin corrosion/irritation, Category 2                                  |
| STOT SE 3                           | Specific target organ toxicity — Single exposure, Category 3, Narcosis |

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