remel
Part of Thermo Fisher Scientific

# SAFETY DATA SHEET

**Creation Date** 22-Feb-2011 **Revision Date** 10-Dec-2021 **Revision Number** 6

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

**Product Description:** RapID CB Plus Panel
**Cat No. :** R8311008

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

**Recommended Use** Laboratory chemicals.
**Uses advised against** No Information available

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

**Company**

Oxoid Ltd
Wade Road
Basingstoke, Hants, UK
RG24 8PW
Tel: +44 (0) 1256 841144

**EU entity/business name**
Oxoid Deutschland GmbH
Postfach 10 07 53
D-46483
Wesel
GERMANY
Tel: + 49 (0) 281 1520
Fax: 49 (0) 281 1521

**E-mail address** mbd-sds@thermofisher.com

### 1.4. Emergency telephone number

Chemtrec US: (800) 424-9300
Chemtrec EU: 001-703-527-3887
Chemtrec China: 400 120 4937

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

**CLP Classification - Regulation (EC) No 1272/2008**

**Physical hazards**

Based on available data, the classification criteria are not met

**Health hazards**

| | |
|---|---|
| Reproductive Toxicity | Category 1B (H360FD) |

**Environmental hazards**
Based on available data, the classification criteria are not met

*Full text of Hazard Statements: see section 16*

### 2.2. Label elements



**Signal Word** **Danger**

**Hazard Statements**
H360FD - May damage fertility. May damage the unborn child

**Precautionary Statements**
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P308 + P313 - IF exposed or concerned: Get medical advice/attention
P280 - Wear protective gloves/protective clothing/eye protection/face protection

**Additional EU labelling**
Restricted to professional users

### 2.3. Other hazards

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

| Component | CAS No | EC No | Weight % | CLP Classification - Regulation (EC) No 1272/2008 |
|---|---|---|---|---|
| 2-Methoxyethanol | 109-86-4 | EEC No. 203-713-7 | 8.3 | Flam. Liq. 3 (H226)<br>Acute Tox. 4 (H302)<br>Acute Tox. 4 (H312)<br>Acute Tox. 4 (H332)<br>Repr. 1B (H360FD)<br>STOT SE1 (H370)<br>STOT RE2 (H373) |
| Acetic acid | 64-19-7 | 200-580-7 | 1.6 | Flam. Liq. 3 (H226)<br>Skin Corr. 1A (H314)<br>Eye Dam. 1 (H318) |
| Sodium tetradecyl Sulphate | 139-88-8 | EEC No. 205-380-3 | 0.5 | Skin Corr. 1B (H314)<br>Acute Tox. 4 (H302)<br>Acute Tox. 4 (H312) |

| Component | Specific concentration limits (SCL's) | M-Factor | Component notes |
|---|---|---|---|

| | | | |
|---|---|---|---|
| Acetic acid | Skin Corr. 1A (H314) :: C>=90%<br>Skin Corr. 1B (H314) ::<br>25%<=C<90%<br>Eye Irrit. 2 (H319) ::<br>10%<=C<25%<br>Skin Irrit. 2 (H315) ::<br>10%<=C<25% | - | - |

*Full text of Hazard Statements: see section 16*

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if symptoms occur.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.

**Ingestion** Clean mouth with water. Get medical attention. Do not induce vomiting without medical advice.

**Inhalation** Not an expected route of exposure. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**Self-Protection of the First Aider** Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

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

No information available.

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

**Notes to Physician** Treat symptomatically.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

**Suitable Extinguishing Media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

**Extinguishing media which must not be used for safety reasons**
No information available.

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

Thermal decomposition can lead to release of irritating gases and vapors.

**Hazardous Combustion Products**
Carbon oxides, Sulfur oxides.

### 5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation.

### 6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so.

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

Soak up with inert absorbent material. Clean contaminated surface thoroughly. Keep in suitable, closed containers for disposal. Do not empty into drains.

### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Handle product only in closed system or provide appropriate exhaust ventilation.

**Hygiene Measures**
Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

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

Keep at temperatures between 2° and 8 °C. Keep container tightly closed.

**Technical Rules for Hazardous Substances (TRGS) 510 Storage Class (LGK) (Germany)** Class 6.1D

### 7.3. Specific end use(s)

Use in laboratories

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

**Exposure limits**
List source(s): **EU** - Commission Directive (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC **UK** - EH40/2005 Work Exposure Limits, Third edition. Published 2018. **IRE -** 2018 Code of Practice for the Chemical Agents Regulations, Schedule 1. Published by the Health and Safety Authority

| Component | The United Kingdom | European Union | Ireland |
|---|---|---|---|
| 2-Methoxyethanol | STEL: 3 ppm 15 min | TWA: 1 ppm (8h) | TWA: 1 ppm 8 hr. |

| | | | |
|---|---|---|---|
| | STEL: 9 mg/m³ 15 min<br>TWA: 1 ppm 8 hr<br>TWA: 3 mg/m³ 8 hr<br>Skin | Skin | STEL: 3 ppm 15 min<br>Skin |
| Acetic acid | STEL: 37 mg/m³<br>STEL: 15 ppm<br>TWA: 10 ppm<br>TWA: 25 mg/m³ | TWA: 25 mg/m³ (15min)<br>TWA: 10 ppm (15min)<br>STEL: 50 mg/m³ (8h)<br>STEL: 20 ppm (8h) | TWA: 20 ppm 8 hr.<br>TWA: 50 mg/m³ 8 hr.<br>STEL: 20 ppm 15 min<br>STEL: 50 mg/m³ 15 min |

**Biological limit values**
List source(s):

**Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)**
See table for values

| Component | Acute effects local (Oral) | Acute effects systemic (Oral) | Chronic effects local (Oral) | Chronic effects systemic (Oral) |
|---|---|---|---|---|
| 2-Methoxyethanol<br>109-86-4 ( 8.3 ) | | | | 11 mg/kg bw/d |

| Component | Acute effects local (Dermal) | Acute effects systemic (Dermal) | Chronic effects local (Dermal) | Chronic effects systemic (Dermal) |
|---|---|---|---|---|
| 2-Methoxyethanol<br>109-86-4 ( 8.3 ) | | | | DNEL = 0.22mg/kg bw/day |

| Component | Acute effects local (Inhalation) | Acute effects systemic (Inhalation) | Chronic effects local (Inhalation) | Chronic effects systemic (Inhalation) |
|---|---|---|---|---|
| 2-Methoxyethanol<br>109-86-4 ( 8.3 ) | | | | DNEL = 0.31mg/m³ |
| Acetic acid<br>64-19-7 ( 1.6 ) | DNEL = 25mg/m³ | | DNEL = 25mg/m³ | |

**Predicted No Effect Concentration (PNEC)**
See values below.

| Component | Fresh water | Fresh water sediment | Water Intermittent | Microorganisms in sewage treatment | Soil (Agriculture) |
|---|---|---|---|---|---|
| 2-Methoxyethanol<br>109-86-4 ( 8.3 ) | PNEC = 10mg/L | PNEC = 36.8mg/kg sediment dw | PNEC = 94mg/L | PNEC = 1000mg/L | PNEC = 1.87mg/kg soil dw |
| Acetic acid<br>64-19-7 ( 1.6 ) | PNEC = 3.058mg/L | PNEC = 11.36mg/kg sediment dw | PNEC = 30.58mg/L | PNEC = 85mg/L | PNEC = 0.47mg/kg soil dw |

| Component | Marine water | Marine water sediment | Marine water intermittent | Food chain | Air |
|---|---|---|---|---|---|
| 2-Methoxyethanol<br>109-86-4 ( 8.3 ) | PNEC = 1mg/L | PNEC = 3.68mg/kg sediment dw | | PNEC = 7.3mg/kg food | |
| Acetic acid<br>64-19-7 ( 1.6 ) | PNEC = 0.3058mg/L | PNEC = 1.136mg/kg sediment dw | | | |

**8.2. Exposure controls**

**Engineering Measures**
Ensure adequate ventilation, especially in confined areas.
Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

**Personal protective equipment**

**Eye Protection** Wear safety glasses with side shields (or goggles) (European standard - EN 166)

**Hand Protection** Protective gloves

| Glove material | Breakthrough time | Glove thickness | EU standard | Glove comments |
|---|---|---|---|---|
| Disposable gloves | See manufacturers recommendations | - | EN 374 | (minimum requirement) |

**Skin and body protection** Long sleeved clothing.

Inspect gloves before use.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)
Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.
Remove gloves with care avoiding skin contamination.

**Respiratory Protection** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly

**Large scale/emergency use** In case of insufficient ventilation, wear suitable respiratory equipment

**Small scale/Laboratory use** Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
When RPE is used a face piece Fit Test should be conducted

**Environmental exposure controls** No information available.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

| | | |
|---|---|---|
| **Physical State** | Liquid | |
| **Appearance** | Colourless | |
| **Odor** | No information available | |
| **Odor Threshold** | No data available | |
| **Melting Point/Range** | No data available | |
| **Softening Point** | No data available | |
| **Boiling Point/Range** | Not applicable | |
| **Flammability (liquid)** | No data available | |
| **Flammability (solid,gas)** | Not applicable | Liquid |
| **Explosion Limits** | No data available | |
| **Flash Point** | Not applicable | **Method -** No information available |
| **Autoignition Temperature** | No data available | |
| **Decomposition Temperature** | No data available | |
| **pH** | 2.4 | |
| **Viscosity** | No data available | |
| **Water Solubility** | Soluble in water | |
| **Solubility in other solvents** | No information available | |

**Partition Coefficient (n-octanol/water)**

| Component | log Pow |
|---|---|
| 2-Methoxyethanol | -0.85 |
| Acetic acid | -0.2 |

| | |
|---|---|
| **Vapor Pressure** | No data available |
| **Density / Specific Gravity** | No data available |

| | | |
|---|---|---|
| **Bulk Density** | Not applicable | Liquid |
| **Vapor Density** | No data available | (Air = 1.0) |
| **Particle characteristics** | Not applicable (liquid) | |

**9.2. Other information**

## SECTION 10: STABILITY AND REACTIVITY

**10.1. Reactivity**

None known, based on information available

**10.2. Chemical stability**

Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**

| | |
|---|---|
| **Hazardous Polymerization** | Hazardous polymerization does not occur. |
| **Hazardous Reactions** | None under normal processing. |

**10.4. Conditions to avoid**

Incompatible products. Excess heat.

**10.5. Incompatible materials**

None known.

**10.6. Hazardous decomposition products**

Carbon oxides. Sulfur oxides.

## SECTION 11: TOXICOLOGICAL INFORMATION

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

**Product Information** Product does not present an acute toxicity hazard based on known or supplied information

**(a) acute toxicity;**

| | |
|---|---|
| **Oral** | Based on available data, the classification criteria are not met |
| **Dermal** | Based on available data, the classification criteria are not met |
| **Inhalation** | Based on available data, the classification criteria are not met |

**Toxicology data for the components**

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| 2-Methoxyethanol | LD50 = 2370 mg/kg ( Rat ) | LD50 = 1280 mg/kg ( Rabbit ) | LC50 = 1478 ppm ( Rat ) 7 h |
| Acetic acid | 3310 mg/kg ( Rat ) | - | > 40 mg/L ( Rat ) 4 h |
| Sodium tetradecyl Sulphate | LD50 = 1250 mg/kg ( Rat ) | - | - |

**(b) skin corrosion/irritation;** Based on available data, the classification criteria are not met

**(c) serious eye damage/irritation;** Based on available data, the classification criteria are not met

**(d) respiratory or skin sensitization;**

| | |
|---|---|
| **Respiratory** | No data available |
| **Skin** | No data available |
| **(e) germ cell mutagenicity;** | No data available |
| **(f) carcinogenicity;** | No data available<br>There are no known carcinogenic chemicals in this product |
| **(g) reproductive toxicity;** | Category 1B |
| **Reproductive Effects** | Category 2: Substances which should be regarded as if they impair fertility in humans. |
| **Developmental Effects** | Developmental effects have occurred in experimental animals. |
| **(h) STOT-single exposure;** | No data available |
| **(i) STOT-repeated exposure;** | No data available |
| **Target Organs** | No information available. |
| **(j) aspiration hazard;** | No data available |
| **Symptoms / effects,both acute and delayed** | No information available. |

**11.2. Information on other hazards**

| | |
|---|---|
| **Endocrine Disrupting Properties** | Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors. |

## SECTION 12: ECOLOGICAL INFORMATION

**12.1. Toxicity**

**Ecotoxicity effects** .

| Component | Freshwater Fish | Water Flea | Freshwater Algae |
|---|---|---|---|
| 2-Methoxyethanol | LC50: = 9650 mg/L, 96h static (Lepomis macrochirus)<br>LC50: = 16000 mg/L, 96h static (Oncorhynchus mykiss)<br>LC50: = 10000 mg/L, 96h static (Lepomis macrochirus) | | |
| Acetic acid | Pimephales promelas: LC50 = 88 mg/L/96h<br>Lepomis macrochirus: LC50 = 75 mg/L/96h | EC50 = 95 mg/L/24h | - |

| Component | Microtox | M-Factor |
|---|---|---|
| Acetic acid | Photobacterium phosphoreum: EC50 = 8.8 mg/L/15 min<br>Photobacterium phosphoreum: EC50 = 8.8 mg/L/25 min<br>Photobacterium phosphoreum: EC50 = 8.8 mg/L/5 min | |

**12.2. Persistence and degradability**

**Persistence** Soluble in water, Persistence is unlikely, based on information available.

**12.3. Bioaccumulative potential** Bioaccumulation is unlikely

| Component | log Pow | Bioconcentration factor (BCF) |
|---|---|---|
| 2-Methoxyethanol | -0.85 | No data available |
| Acetic acid | -0.2 | No data available |

**12.4. Mobility in soil** The product is water soluble, and may spread in water systems Will likely be mobile in the environment due to its water solubility. Highly mobile in soils

**12.5. Results of PBT and vPvB assessment** No data available for assessment.

**12.6. Endocrine disrupting properties**

**Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors

**12.7. Other adverse effects**

**Persistent Organic Pollutant** This product does not contain any known or suspected substance

**Ozone Depletion Potential** This product does not contain any known or suspected substance

## SECTION 13: DISPOSAL CONSIDERATIONS

**13.1. Waste treatment methods**

**Waste from Residues/Unused Products** Dispose of in accordance with federal, state and local regulations. Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

**Contaminated Packaging** Dispose of in accordance with federal, state, and local regulations. Dispose of this container to hazardous or special waste collection point.

**European Waste Catalogue (EWC)** According to the European Waste Catalog, Waste Codes are not product specific, but application specific.

**Other Information** Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains.

## SECTION 14: TRANSPORT INFORMATION

**IMDG/IMO** Not regulated

**14.1. UN number**

**14.2. UN proper shipping name**

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

**14.4. Packing group**

**ADR** Not regulated

**14.1. UN number**
**14.2. UN proper shipping name**
**14.3. Transport hazard class(es)**
**14.4. Packing group**

**IATA** Not regulated

**14.1. UN number**
**14.2. UN proper shipping name**
**14.3. Transport hazard class(es)**
**14.4. Packing group**

**14.5. Environmental hazards** No hazards identified

**14.6. Special precautions for user** No special precautions required

**14.7. Maritime transport in bulk according to IMO instruments** Not applicable, packaged goods

## SECTION 15: REGULATORY INFORMATION

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

**International Inventories**
Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

| Component | CAS No | EINECS | ELINCS | NLP | IECSC | TCSI | KECL | ENCS | ISHL |
|---|---|---|---|---|---|---|---|---|---|
| 2-Methoxyethanol | 109-86-4 | 203-713-7 | - | - | X | X | KE-23272 | X | X |
| Acetic acid | 64-19-7 | 200-580-7 | - | - | X | X | X | X | X |
| Sodium tetradecyl Sulphate | 139-88-8 | 205-380-3 | - | - | - | X | - | X | X |

| Component | CAS No | TSCA | TSCA Inventory notification - Active-Inactive | DSL | NDSL | AICS | NZIoC | PICCS |
|---|---|---|---|---|---|---|---|---|
| 2-Methoxyethanol | 109-86-4 | X | ACTIVE | X | - | X | X | X |
| Acetic acid | 64-19-7 | X | ACTIVE | X | - | X | X | X |
| Sodium tetradecyl Sulphate | 139-88-8 | X | ACTIVE | X | - | X | X | - |

**Legend:** X - Listed '-' - Not Listed **KECL** - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

**Authorisation/Restrictions according to EU REACH**

| Component | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|---|---|---|---|
| 2-Methoxyethanol | - | Use restricted. See item 30. (see link for restriction details) Use restricted. See item 75. (see link for restriction details) | SVHC Candidate list - 203-713-7 - Toxic for reproduction, Article 57c |
| Acetic acid | - | Use restricted. See item 75. (see link for restriction details) | - |

After the sunset date the use of this substance requires either an authorization or can only be used for exempted uses, e.g. use in scientific research and development which includes routine analytics or use as intermediate.

*https://echa.europa.eu/authorisation-list*
*https://echa.europa.eu/substances-restricted-under-reach*

*https://echa.europa.eu/candidate-list-table*

| Component | CAS No | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements |
|---|---|---|---|
| 2-Methoxyethanol | 109-86-4 | Not applicable | Not applicable |
| Acetic acid | 64-19-7 | Not applicable | Not applicable |
| Sodium tetradecyl Sulphate | 139-88-8 | Not applicable | Not applicable |

**Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals**
Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .
Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values
Take note of Directive 94/33/EC on the protection of young people at work
Take note of Dir 92/85/EC on the protection of pregnant and breastfeeding women at work

**National Regulations**

**UK** - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

**WGK Classification** Water endangering class = 2 (self classification)

| Component | Germany - Water Classification (VwVwS) | Germany - TA-Luft Class |
|---|---|---|
| 2-Methoxyethanol | WGK 2 | |
| Acetic acid | WGK1 | Class II : 0.10 g/m³ (Massenkonzentration) |

| Component | France - INRS (Tables of occupational diseases) |
|---|---|
| 2-Methoxyethanol | Tableaux des maladies professionnelles (TMP) - RG 84 |

| Component | Switzerland - Ordinance on the Reduction of Risk from handling of hazardous substances preparation (SR 814.81) | Switzerland - Ordinance on Incentive Taxes on Volatile Organic Compounds (OVOC) | Switzerland - Ordinance of the Rotterdam Convention on the Prior Informed Consent Procedure |
|---|---|---|---|
| 2-Methoxyethanol<br>109-86-4 ( 8.3 ) | | Group I | |
| Acetic acid<br>64-19-7 ( 1.6 ) | Prohibited and Restricted Substances | Group I | |

**15.2. Chemical safety assessment**

Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures

## SECTION 16: OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3**
H226 - Flammable liquid and vapor
H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage
H360FD - May damage fertility. May damage the unborn child
H302 - Harmful if swallowed
H312 - Harmful in contact with skin
H332 - Harmful if inhaled

**Legend**

**CAS** - Chemical Abstracts Service
**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances
**IECSC** - Chinese Inventory of Existing Chemical Substances
**KECL** - Korean Existing and Evaluated Chemical Substances
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
**ENCS** - Japanese Existing and New Chemical Substances
**AICS** - Australian Inventory of Chemical Substances
**NZIoC** - New Zealand Inventory of Chemicals

**WEL** - Workplace Exposure Limit
**ACGIH** - American Conference of Governmental Industrial Hygienists
**DNEL** - Derived No Effect Level
**RPE** - Respiratory Protective Equipment
**LC50** - Lethal Concentration 50%
**NOEC** - No Observed Effect Concentration
**PBT** - Persistent, Bioaccumulative, Toxic
**TWA** - Time Weighted Average
**IARC** - International Agency for Research on Cancer
Predicted No Effect Concentration (PNEC)
**LD50** - Lethal Dose 50%
**EC50** - Effective Concentration 50%
**POW** - Partition coefficient Octanol:Water
**vPvB** - very Persistent, very Bioaccumulative

**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road
**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code
**OECD** - Organisation for Economic Co-operation and Development
**BCF** - Bioconcentration factor
**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association
**MARPOL** - International Convention for the Prevention of Pollution from Ships
**ATE** - Acute Toxicity Estimate
**VOC** - (Volatile Organic Compound)

**Key literature references and sources for data**
https://echa.europa.eu/information-on-chemicals
Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:**

| | |
|---|---|
| **Physical hazards** | On basis of test data |
| **Health Hazards** | Calculation method |
| **Environmental hazards** | Calculation method |

**Training Advice**
Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

| | |
|---|---|
| **Creation Date** | 22-Feb-2011 |
| **Revision Date** | 10-Dec-2021 |
| **Revision Summary** | Update to CLP Format. |

**This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006** .

.

**Disclaimer**

**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text**

# End of Safety Data Sheet