

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Total Hardness No.1 Liquid

Revision date 11-30-2021

Revision Number 2

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

1.1. Product identifier

Product Code(s) POL20TH1, PL20TH1, FW10TH1
Product Name Total Hardness No.1 Liquid
Unique Formula Identifier (UFI) JCNV-83A2-7125-TMS0
Pure substance/mixture Mixture
Contains 1-Piperazineethanesulfonic acid, 4-(2-hydroxyethyl)-, Sodium hydroxide, Ethylene glycol

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

Recommended use Reagent for water analysis
Uses advised against Others

1.3. Details of the supplier of the safety data sheet

Manufacturer

Water-I.D. GmbH
Daimlerstr. 20
76344 Eggenstein, Germany
Tel.: +49 (0) 721 78 20 29 0, Fax: +49 (0) 721 78 20 29 11
Website: www.water-id.com
EHS / Compliance: lab@water-id.com

1.4. Emergency telephone number

Emergency Telephone Poison Control Centre Munich
Tel.: +49 (0) 89 19 24 0
Germany
24 hours service
Languages: German, English

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

| | |
|---|---------------------|
| Acute toxicity - Oral | Category 4 - (H302) |
| Skin corrosion/irritation | Category 2 - (H315) |
| Serious eye damage/eye irritation | Category 2 - (H319) |
| Specific target organ toxicity — single exposure | Category 2 - (H373) |

2.2. Label elements

Contains 1-Piperazineethanesulfonic acid, 4-(2-hydroxyethyl)-, Sodium hydroxide, Ethylene glycol

**Signal word**

Warning

Hazard statements

H302 - Harmful if swallowed

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary Statements - EU (§28, 1272/2008)

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P280 - Wear protective gloves and eye/face protection

P337 + P313 - If eye irritation persists: Get medical advice/attention

P501 - Dispose of contents/ container to an approved waste disposal plant

Additional information

This product requires tactile warnings if supplied to the general public.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients**3.1 Substances**

Not applicable

3.2 Mixtures

| Chemical name | Weight-% | REACH registration number | EC No | Classification according to Regulation (EC) No. 1272/2008 [CLP] | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) |
|-------------------------------|----------|---------------------------|-----------|---|--|----------|----------------------|
| Ethylene glycol 107-21-1 | 30-50 | No data available | 203-473-3 | Acute Tox. 4 (H302) | | | |
| Sodium hydroxide 1310-73-2 | <1.5 | No data available | 215-185-5 | Skin Corr. 1A (H314) | Eye Irrit. 2 :: 0.5%≤C<2% Skin Corr. 1A :: C≥5% Skin Corr. 1B :: 2%≤C<5% Skin Irrit. 2 :: 0.5%≤C<2% | | |

Full text of H- and EUH-phrases: see section 16**Acute Toxicity Estimate**

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 - 4 hour - dust/mist - mg/L | Inhalation LC50 - 4 hour - vapour - mg/L | Inhalation LC50 - 4 hour - gas - ppm |
|-------------------------------|-----------|-------------|---|--|--------------------------------------|
| Ethylene glycol 107-21-1 | 4700 | 10600 | | | |
| Sodium hydroxide 1310-73-2 | 325 | 1350 | | | |

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---|---|
| General advice | Show this safety data sheet to the doctor in attendance. |
| Inhalation | Remove to fresh air. Get medical attention immediately if symptoms occur. |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists. |
| Skin contact | Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists. |
| Ingestion | Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a doctor. |
| Self-protection of the first aider | Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8). |

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

Symptoms May cause redness and tearing of the eyes. Burning sensation.

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

Note to doctors 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.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical No information available.

5.3. Advice for firefighters

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

| | |
|---------------------------------|--|
| Personal precautions | Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. |
| Other information | Refer to protective measures listed in Sections 7 and 8. |
| For emergency responders | Use personal protection recommended in Section 8. |

6.2. Environmental precautions

| | |
|----------------------------------|---|
| Environmental precautions | Prevent further leakage or spillage if safe to do so. |
|----------------------------------|---|

6.3. Methods and material for containment and cleaning up

| | |
|--|--|
| Methods for containment | Prevent further leakage or spillage if safe to do so. |
| Methods for cleaning up | Take up mechanically, placing in appropriate containers for disposal. |
| Prevention of secondary hazards | Clean contaminated objects and areas thoroughly observing environmental regulations. |

6.4. Reference to other sections

| | |
|------------------------------------|--|
| Reference to other sections | See section 8 for more information. See section 13 for more information. |
|------------------------------------|--|

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

| | |
|---------------------------------------|--|
| Advice on safe handling | Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. |
| General hygiene considerations | Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing. |

7.2. Conditions for safe storage, including any incompatibilities

| | |
|---------------------------|---|
| Storage Conditions | Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. |
|---------------------------|---|

7.3. Specific end use(s)

| | |
|--------------------------------------|--|
| Risk Management Methods (RMM) | The information required is contained in this Safety Data Sheet. |
|--------------------------------------|--|

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure Limits**

| Chemical name | European Union | Austria | Belgium | Bulgaria | Croatia |
|-----------------------------|--|--|---------|---|--|
| Ethylene glycol 107-21-1 | TWA: 20 ppm TWA: 52 mg/m ³ STEL: 40 ppm STEL: 104 mg/m ³ * | TWA: 10 ppm TWA: 26 mg/m ³ STEL 20 ppm STEL 52 mg/m ³ H* | * | STEL: 40 ppm STEL: 104 mg/m ³ TWA: 52 mg/m ³ TWA: 20 ppm K* | TWA: 20 ppm TWA: 52 mg/m ³ STEL: 40 ppm STEL: 104 mg/m ³ * |

| | | | | | |
|-------------------------------|---|---|--|---|---|
| Sodium hydroxide 1310-73-2 | - | TWA: 2 mg/m ³ STEL 4 mg/m ³ | - | TWA: 2.0 mg/m ³ | STEL: 2 mg/m ³ |
| Chemical name | Cyprus | Czech Republic | Denmark | Estonia | Finland |
| Ethylene glycol 107-21-1 | * STEL: 40 ppm STEL: 104 mg/m ³ TWA: 20 ppm TWA: 52 mg/m ³ | TWA: 50 mg/m ³ Ceiling: 100 mg/m ³ * | TWA: 10 ppm TWA: 26 mg/m ³ TWA: 10 mg/m ³ H* | TWA: 20 ppm TWA: 52 mg/m ³ STEL: 40 ppm STEL: 104 mg/m ³ A* | TWA: 20 ppm TWA: 50 mg/m ³ STEL: 40 ppm STEL: 100 mg/m ³ iho* |
| Sodium hydroxide 1310-73-2 | - | TWA: 1 mg/m ³ Ceiling: 2 mg/m ³ | Ceiling: 2 mg/m ³ | TWA: 1 mg/m ³ STEL: 2 mg/m ³ | Ceiling: 2 mg/m ³ |
| Chemical name | France | Germany | Germany MAK | Greece | Hungary |
| Ethylene glycol 107-21-1 | TWA: 20 ppm TWA: 52 mg/m ³ STEL: 40 ppm STEL: 104 mg/m ³ * | TWA: 10 ppm TWA: 26 mg/m ³ H* | TWA: 10 ppm TWA: 26 mg/m ³ Peak: 20 ppm Peak: 52 mg/m ³ * | TWA: 50 ppm TWA: 125 mg/m ³ STEL: 50 ppm STEL: 125 mg/m ³ | TWA: 52 mg/m ³ STEL: 104 mg/m ³ * |
| Sodium hydroxide 1310-73-2 | TWA: 2 mg/m ³ | - | - | TWA: 2 mg/m ³ STEL: 2 mg/m ³ | TWA: 1 mg/m ³ STEL: 2 mg/m ³ |
| Chemical name | Ireland | Italy | Italy REL | Latvia | Lithuania |
| Ethylene glycol 107-21-1 | TWA: 10 mg/m ³ TWA: 20 ppm TWA: 52 mg/m ³ STEL: 40 ppm STEL: 30 mg/m ³ STEL: 104 mg/m ³ Sk* | TWA: 20 ppm TWA: 52 mg/m ³ STEL: 40 ppm STEL: 104 mg/m ³ pelle* | TWA: 25 ppm STEL: 50 ppm STEL: 10 mg/m ³ | TWA: 20 ppm TWA: 52 mg/m ³ STEL: 40 ppm STEL: 104 mg/m ³ * | * TWA: 10 ppm TWA: 25 mg/m ³ STEL: 20 ppm STEL: 50 mg/m ³ |
| Sodium hydroxide 1310-73-2 | STEL: 2 mg/m ³ | - | Ceiling: 2 mg/m ³ | TWA: 0.5 mg/m ³ | Ceiling: 2 mg/m ³ |
| Chemical name | Luxembourg | Malta | Netherlands | Norway | Poland |
| Ethylene glycol 107-21-1 | * STEL: 40 ppm STEL: 104 mg/m ³ TWA: 20 ppm TWA: 52 mg/m ³ | * STEL: 40 ppm STEL: 104 mg/m ³ TWA: 20 ppm TWA: 52 mg/m ³ | TWA: 52 mg/m ³ TWA: 10 mg/m ³ STEL: 104 mg/m ³ H* | TWA: 20 ppm TWA: 52 mg/m ³ STEL: 104 mg/m ³ STEL: 40 ppm H* | STEL: 50 mg/m ³ TWA: 15 mg/m ³ * |
| Sodium hydroxide 1310-73-2 | - | - | - | Ceiling: 2 mg/m ³ | STEL: 1 mg/m ³ TWA: 0.5 mg/m ³ |
| Chemical name | Portugal | Romania | Slovakia | Slovenia | Spain |
| Ethylene glycol 107-21-1 | TWA: 20 ppm TWA: 52 mg/m ³ STEL: 40 ppm STEL: 104 mg/m ³ Ceiling: 100 mg/m ³ P* | TWA: 20 ppm TWA: 52 mg/m ³ STEL: 40 ppm STEL: 104 mg/m ³ * | TWA: 20 ppm TWA: 52 mg/m ³ * Ceiling: 104 mg/m ³ | TWA: 20 ppm TWA: 52 mg/m ³ STEL: STEL ppm STEL: STEL mg/m ³ * | TWA: 20 ppm TWA: 52 mg/m ³ STEL: 40 ppm STEL: 104 mg/m ³ via dérmica* |
| Sodium hydroxide 1310-73-2 | Ceiling: 2 mg/m ³ | TWA: 1 mg/m ³ STEL: 3 mg/m ³ | TWA: 2 mg/m ³ | - | STEL: 2 mg/m ³ |
| Chemical name | Sweden | | Switzerland | United Kingdom | |
| Ethylene glycol 107-21-1 | NGV: 10 ppm NGV: 25 mg/m ³ Bindande KGV: 40 ppm Bindande KGV: 104 mg/m ³ * | | TWA: 10 ppm TWA: 26 mg/m ³ STEL: 20 ppm STEL: 52 mg/m ³ H* | TWA: 10 mg/m ³ TWA: 20 ppm TWA: 52 mg/m ³ STEL: 40 ppm STEL: 104 mg/m ³ STEL: 30 mg/m ³ Sk* | |
| Sodium hydroxide 1310-73-2 | NGV: 1 mg/m ³ Bindande KGV: 2 mg/m ³ | | TWA: 2 mg/m ³ STEL: 2 mg/m ³ | STEL: 2 mg/m ³ | |

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Personal protective equipment

| | |
|--|--|
| Eye/face protection | If splashes are likely to occur, wear safety glasses with side-shields. |
| Hand protection | Wear suitable gloves. Impervious gloves. |
| Skin and body protection | Wear suitable protective clothing. Long sleeved clothing. |
| Respiratory protection | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| General hygiene considerations | Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing. |
| 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 | aqueous solution |
| Colour | red brown |
| Odour | Odourless. |
| Odour threshold | No information available |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|---|--------------------------|--------------------------|
| Melting point / freezing point | No data available | None known |
| Boiling point / boiling range | No data available | None known |
| Flammability (solid, gas) | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | No data available | |
| Flash point | No data available | None known |
| Autoignition temperature | No data available | None known |
| Decomposition temperature | | None known |
| pH | 8.10 | None known |
| pH (as aqueous solution) | No data available | No information available |
| Kinematic viscosity | No data available | None known |
| Dynamic viscosity | No data available | None known |
| Water solubility | No data available | None known |
| Solubility(ies) | No data available | None known |
| Partition coefficient | No data available | None known |
| Vapour pressure | No data available | None known |
| Relative density | No data available | None known |
| Bulk density | No data available | |
| Liquid Density | No data available | |
| Relative vapour density | No data available | None known |
| Particle characteristics | | |
| Particle Size | No information available | |
| Particle Size Distribution | No information available | |

9.2. Other information

9.2.1. Information with regards to physical hazard classes
Not applicable

9.2.2. Other safety characteristics
No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

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

Information on likely routes of exposure

Product Information

| | |
|---------------------|---|
| Inhalation | Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. |
| Eye contact | Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain. |
| Skin contact | Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components). |
| Ingestion | Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Harmful if swallowed. (based on components). |

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. May cause redness and tearing of the eyes.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document

| | |
|-----------------|----------------|
| ATEmix (oral) | 1,049.20 mg/kg |
| ATEmix (dermal) | 6,458.60 mg/kg |

Unknown acute toxicity

4.09 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|------------------|----------------------|-------------------------|-----------------|
| Ethylene glycol | = 4700 mg/kg (Rat) | = 10600 mg/kg (Rat) | |
| Sodium hydroxide | = 325 mg/kg (Rat) | = 1350 mg/kg (Rabbit) | |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|--|--|
| Skin corrosion/irritation | Classification based on data available for ingredients. Irritating to skin. |
| Serious eye damage/eye irritation | Classification based on data available for ingredients. Causes serious eye irritation. |
| Respiratory or skin sensitisation | No information available. |
| Germ cell mutagenicity | No information available. |
| Carcinogenicity | No information available. |
| Reproductive toxicity | No information available. |
| STOT - single exposure | No information available. |
| STOT - repeated exposure | No information available. |
| Aspiration hazard | No information available. |

11.2. Information on other hazards**11.2.1. Endocrine disrupting properties**

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information**12.1. Toxicity**

Ecotoxicity**Unknown aquatic toxicity** Contains 0 % of components with unknown hazards to the aquatic environment.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|------------------|---|--|----------------------------|---------------------------------------|
| Ethylene glycol | EC50: 6500 - 13000mg/L (96h, Pseudokirchneriella subcapitata) | LC50: 14 - 18mL/L (96h, Oncorhynchus mykiss) LC50: 40000 - 60000mg/L (96h, Pimephales promelas) LC50: =16000mg/L (96h, Poecilia reticulata) LC50: =27540mg/L (96h, Lepomis macrochirus) LC50: =40761mg/L (96h, Oncorhynchus mykiss) LC50: =41000mg/L (96h, Oncorhynchus mykiss) | - | EC50: =46300mg/L (48h, Daphnia magna) |
| Sodium hydroxide | - | LC50: =45.4mg/L (96h, Oncorhynchus mykiss) | - | - |

12.2. Persistence and degradability**Persistence and degradability** No information available.**12.3. Bioaccumulative potential****Bioaccumulation** There is no data for this product.**Component Information**

| Chemical name | Partition coefficient |
|-----------------|-----------------------|
| Ethylene glycol | -1.93 |

12.4. Mobility in soil**Mobility in soil** No information available.**12.5. Results of PBT and vPvB assessment****PBT and vPvB assessment**

| Chemical name | PBT and vPvB assessment |
|------------------|---|
| Ethylene glycol | The substance is not PBT / vPvB PBT assessment does not apply |
| Sodium hydroxide | The substance is not PBT / vPvB PBT assessment does not apply |

12.6. Endocrine disrupting properties**Endocrine disrupting properties** No information available.**12.7. Other adverse effects**

No information available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Waste from residues/unused** Dispose of in accordance with local regulations. Dispose of waste in accordance with

| | |
|------------------------|--------------------------------|
| products | environmental legislation. |
| Contaminated packaging | Do not reuse empty containers. |

SECTION 14: Transport information

IATA

| | |
|-----------------------------------|----------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 | |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special precautions for user | |
| Special Provisions | None |

IMDG

| | |
|--|-------------------------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 | |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Marine pollutant | Not applicable |
| 14.6 Special precautions for user | |
| Special Provisions | None No information available |
| 14.7 Maritime transport in bulk according to IMO instruments | No information available |

RID

| | |
|-----------------------------------|----------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 | |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special precautions for user | |
| Special Provisions | None |

ADR

| | |
|-----------------------------------|----------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 | |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special precautions for user | |
| Special Provisions | None |

SECTION 15: Regulatory information

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

National regulations

France

Occupational Illnesses (R-463-3, France)

| Chemical name | French RG number | Title |
|-----------------------------|------------------|-------|
| Ethylene glycol 107-21-1 | RG 84 | - |

European Union

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.

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

International Inventories

| | |
|----------------------|-----------------|
| TSCA | Complies |
| DSL/NDSL | Does not comply |
| EINECS/ELINCS | Does not comply |
| ENCS | Does not comply |
| IECSC | Complies |
| KECL | Does not comply |
| PICCS | Complies |
| AICS | Complies |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information**Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

H302 - Harmful if swallowed

H314 - Causes severe skin burns and eye damage

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

| | | | |
|---------|-----------------------------|------|----------------------------------|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | * | Skin designation |

| Classification procedure | |
|---|--------------------|
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used |
| Acute oral toxicity | Calculation method |
| Acute dermal toxicity | Calculation method |
| Acute inhalation toxicity - gas | Calculation method |

| | |
|---------------------------------------|--------------------|
| Acute inhalation toxicity - Vapour | Calculation method |
| Acute inhalation toxicity - dust/mist | Calculation method |
| Skin corrosion/irritation | Calculation method |
| Serious eye damage/eye irritation | Calculation method |
| Respiratory sensitisation | Calculation method |
| Skin sensitisation | Calculation method |
| Mutagenicity | Calculation method |
| Carcinogenicity | Calculation method |
| Reproductive toxicity | Calculation method |
| STOT - single exposure | Calculation method |
| STOT - repeated exposure | Calculation method |
| Acute aquatic toxicity | Calculation method |
| Chronic aquatic toxicity | Calculation method |
| Aspiration hazard | Calculation method |
| Ozone | Calculation method |

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AEGl(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
 Organisation for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

Revision date 11-30-2021

This material safety data sheet complies with the requirements of 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