

## 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

### Calcium Hardness Sea Water Cond. Powder

Revision date 11-29-2021

Revision Number 2

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

##### 1.1. Product identifier

**Product Code(s)** PPHCHSWC  
**Product Name** Calcium Hardness Sea Water Cond. Powder  
**Unique Formula Identifier (UFI)** 2NAN-2G7W-G41P-RCK7  
**Pure substance/mixture** Mixture  
Contains Lithium hydroxide monohydrate

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

**Recommended use** Conditioning reagent  
**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

|  |                     |
|--|---------------------|
| <b>Acute toxicity - Oral</b>                     | Category 3 - (H301) |
| <b>Acute toxicity - Inhalation (Dusts/Mists)</b> | Category 3 - (H331) |
| <b>Skin corrosion/irritation</b>                 | Category 1 - (H314) |
| <b>Serious eye damage/eye irritation</b>         | Category 1 - (H318) |

##### 2.2. Label elements

Contains Lithium hydroxide monohydrate



**Signal word**  
Danger

**Hazard statements**

H301 - Toxic if swallowed  
H314 - Causes severe skin burns and eye damage  
H331 - Toxic if inhaled

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

P260 - Do not breathe dust/fume/gas/mist/vapours/spray  
P280 - Wear protective gloves/protective clothing and eye/face protection  
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P310 - Immediately call a POISON CENTER or doctor  
P331 - Do NOT induce vomiting  
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

**Additional information**

This product requires tactile warnings if supplied to the general public. This product requires child resistant fastenings 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) |
|--|----------|---------------------------|-----------|---|------------------------------------|----------|----------------------|
| Lithium hydroxide monohydrate<br>1310-66-3 | 40-60    | No data available         | -         | No data available   |                                    |          |                      |
| Sodium chloride<br>7647-14-5               | 30-50    | No data available         | 231-598-3 | No data available   |                                    |          |                      |

**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 |
|---------------|-----------|-------------|---|--|--------------------------------------|
|               |           |             |   |  |                                      |

| 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 |
|--|-----------|-------------|---|--|--------------------------------------|
| Lithium hydroxide monohydrate<br>1310-66-3 | 363       |             | >6.15                                       |  |                                      |
| Sodium chloride<br>7647-14-5               | 3000      |             |   |  |                                      |

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

|   |   |
|---|---|
| <b>General advice</b>                     | Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.   |
| <b>Inhalation</b>                         | Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical advice/attention. Do not breathe dust.                   |
| <b>Eye contact</b>                        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.  |
| <b>Skin contact</b>                       | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical advice/attention.   |
| <b>Ingestion</b>                          | Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.   |
| <b>Self-protection of the first aider</b> | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Do not breathe dust. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Use personal protective equipment as required. See section 8 for more information. |

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

|                 |  |
|-----------------|--|
| <b>Symptoms</b> | Burning sensation. Coughing and/ or wheezing. Difficulty in breathing. |
|-----------------|--|

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

|                        |   |
|------------------------|---|
| <b>Note to doctors</b> | Product is a corrosive material. Use of gastric lavage or emesis is contra-indicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. |
|------------------------|---|

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

|                                     |   |
|-------------------------------------|---|
| <b>Suitable Extinguishing Media</b> | 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** The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapours.

### 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** Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid generation of dust. Do not breathe dust.

**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. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

### 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. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Do not breathe dust. Avoid generation of dust.

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Do not breathe dust. Take off contaminated clothing and wash it before reuse.

**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. Protect from moisture. Store locked up. Store away from other materials.

**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                   |
|--|---------------------------|---------|-----------|--------------------------|---------------------------|
| Lithium hydroxide monohydrate<br>1310-66-3 | -                         | -       | -         | -                        | STEL: 1 mg/m <sup>3</sup> |
| Chemical name                              | Ireland                   | Italy   | Italy REL | Latvia                   | Lithuania                 |
| Lithium hydroxide monohydrate<br>1310-66-3 | STEL: 1 mg/m <sup>3</sup> | -       | -         | -                        | -                         |
| Sodium chloride<br>7647-14-5               | -                         | -       | -         | TWA: 5 mg/m <sup>3</sup> | TWA: 5 mg/m <sup>3</sup>  |

**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** Tight sealing safety goggles. Face protection shield.

**Hand protection** Wear suitable gloves. Impervious gloves.

**Skin and body protection** Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

**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** Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Do not breathe dust. Take off contaminated clothing and wash it before reuse.

Environmental exposure controls No information available.

## SECTION 9: Physical and chemical properties

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

|                 |                          |
|-----------------|--------------------------|
| Physical state  | Solid                    |
| Appearance      | Powder                   |
| Colour          | colourless               |
| 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                                     | 12.0                     | 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** Exposure to air or moisture over prolonged periods. Excessive heat.

### 10.5. Incompatible materials

**Incompatible materials** Acids. Bases. Oxidising agent.

### 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**

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. Toxic by inhalation.              |
| <b>Eye contact</b>  | Specific test data for the substance or mixture is not available. Causes serious eye damage. (based on components). Corrosive to the eyes and may cause severe damage including blindness. May cause irreversible damage to eyes.   |
| <b>Skin contact</b> | Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns.   |
| <b>Ingestion</b>    | Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways. |

#### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** Redness. Burning. May cause blindness. Coughing and/ or wheezing. Difficulty in breathing.

#### Numerical measures of toxicity

##### **Acute toxicity**

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

ATEmix (oral) 211.30 mg/kg  
ATEmix (inhalation-dust/mist) 0.960 mg/l

##### **Unknown acute toxicity**

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.  
45 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

**Component Information**

| Chemical name                 | Oral LD50           | Dermal LD50 | Inhalation LC50                   |
|-------------------------------|---------------------|-------------|-----------------------------------|
| Lithium hydroxide monohydrate | = 120 mg/kg ( Rat ) |             | = 0.96 mg/L ( Rat ) 4 h           |
| Sodium chloride               | = 3 g/kg ( Rat )    |             | > 42 g/m <sup>3</sup> ( Rat ) 1 h |

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

|  |   |
|--|---|
| <b>Skin corrosion/irritation</b>         | Classification based on data available for ingredients. Causes burns.                                 |
| <b>Serious eye damage/eye irritation</b> | Classification based on data available for ingredients. Risk of serious damage to eyes. Causes burns. |
| <b>Respiratory or skin sensitisation</b> | No information available.   |
| <b>Germ cell mutagenicity</b>            | No information available.   |
| <b>Carcinogenicity</b>                   | No information available.   |
| <b>Reproductive toxicity</b>             | No information available.   |
| <b>STOT - single exposure</b>            | No information available.   |
| <b>STOT - repeated exposure</b>          | No information available.   |
| <b>Aspiration hazard</b>                 | 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               |
|-----------------|----------------------|-----------------------|----------------------------|-------------------------|
| Sodium chloride | -                    | LC50: 4747 - 7824mg/L | -                          | EC50: 340.7 - 469.2mg/L |



|  |  |  |  |  |
|--|--|--|--|--|
|  |  | (96h, Oncorhynchus mykiss)<br>LC50: 5560 - 6080mg/L<br>(96h, Lepomis macrochirus)<br>LC50: 6020 - 7070mg/L<br>(96h, Pimephales promelas)<br>LC50: 6420 - 6700mg/L<br>(96h, Pimephales promelas)<br>LC50: =12946mg/L (96h, Lepomis macrochirus)<br>LC50: =7050mg/L (96h, Pimephales promelas) |  | (48h, Daphnia magna)<br>EC50: =1000mg/L (48h, Daphnia magna) |
|--|--|--|--|--|

**12.2. Persistence and degradability**

Persistence and degradability No information available.

**12.3. Bioaccumulative potential**

Bioaccumulation No information available.

**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                                       |
|-------------------------------|---|
| Lithium hydroxide monohydrate | The substance is not PBT / vPvB                               |
| Sodium chloride               | 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 products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

**SECTION 14: Transport information**

**IATA**

14.1 UN number or ID number UN2680

|                                   |                                  |
|-----------------------------------|----------------------------------|
| 14.2 UN proper shipping name      | Lithium hydroxide                |
| 14.3 Transport hazard class(es)   | 8                                |
| 14.4 Packing group                | II                               |
| Description                       | UN2680, Lithium hydroxide, 8, II |
| 14.5 Environmental hazards        | Not applicable                   |
| 14.6 Special precautions for user |                                  |
| Special Provisions                | None                             |
| ERG Code                          | 8L                               |

**IMDG**

|  |                                   |
|--|-----------------------------------|
| 14.1 UN number or ID number                                  | UN2680                            |
| 14.2 UN proper shipping name                                 | Lithium hydroxide                 |
| 14.3 Transport hazard class(es)                              | 8                                 |
| 14.4 Packing group   | II                                |
| Description  | UN2680, Lithium hydroxide, 8, II  |
| 14.5 Marine pollutant  | NP                                |
| 14.6 Special precautions for user                            |                                   |
| Special Provisions   | None                              |
| EmS-No   | F-A, S-B No information available |
| 14.7 Maritime transport in bulk according to IMO instruments | No information available          |

**RID**

|                                   |                                  |
|-----------------------------------|----------------------------------|
| 14.1 UN number or ID number       | UN2680                           |
| 14.2 UN proper shipping name      | Lithium hydroxide                |
| 14.3 Transport hazard class(es)   | 8                                |
| 14.4 Packing group                | II                               |
| Description                       | UN2680, Lithium hydroxide, 8, II |
| 14.5 Environmental hazards        | Not applicable                   |
| 14.6 Special precautions for user |                                  |
| Special Provisions                | None                             |
| Classification code               | C6                               |

**ADR**

|                                   |                                       |
|-----------------------------------|---------------------------------------|
| 14.1 UN number or ID number       | UN2680                                |
| 14.2 UN proper shipping name      | Lithium hydroxide                     |
| 14.3 Transport hazard class(es)   | 8                                     |
| 14.4 Packing group                | II                                    |
| Description                       | UN2680, Lithium hydroxide, 8, II, (E) |
| 14.5 Environmental hazards        | Not applicable                        |
| 14.6 Special precautions for user |                                       |
| Special Provisions                | None                                  |
| Classification code               | C6                                    |
| Tunnel restriction code           | (E)                                   |

**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 |
|------------------------------|------------------|-------|
| Sodium chloride<br>7647-14-5 | RG 78            | -     |

**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

**Dangerous substance category per Seveso Directive (2012/18/EU)**

H2 - ACUTE TOXIC

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

Not applicable

**Plant protection products directive (91/414/EEC)**

| Chemical name               | Plant protection products directive (91/414/EEC) |
|-----------------------------|--|
| Sodium chloride - 7647-14-5 | Plant protection agent                           |

**International Inventories**

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

**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 11-29-2021

**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**