

## 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

### Phosphate ULR No.2 Photometer

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)** P P P P P U L R 2  
**Product Name** Phosphate ULR No.2 Photometer  
**Unique Formula Identifier (UFI)** P M 8 N - 0 H W 0 - F T 1 T - V C 9 1  
**Pure substance/mixture** Mixture

##### 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

<b>Serious eye damage/eye irritation</b>	Category 1 - (H318)
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##### 2.2. Label elements



**Signal word**  
Danger

**Hazard statements**

H318 - Causes serious eye damage

EUH031 - Contact with acids liberates toxic gas

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

P280 - Wear eye protection/ face protection

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

**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)
Sodium metabisulfite 7681-57-4	1-10	No data available	231-673-0	Acute Tox. 4 (H302) Eye Dam. 1 (H318) (EUH031)			
Molybdate, hexaammonium, tetrahydrate 12054-85-2	1-5	No data available	-	No data available			
Antimonate(2-), bis[.mu.-(2,3-dihydroxybutanedioato(4-)-O1,O2:O3,O4)]di-, dipotassium, trihydrate, stereoisomer 28300-74-5	<0.5	No data available	-	Acute Tox. 4 (H302) Acute Tox. 4 (H332) Aquatic Chronic 2 (H411)			

**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
Sodium metabisulfite 7681-57-4	1310	2000			
Molybdate, hexaammonium, tetrahydrate 12054-85-2	333				
Antimonate(2-), bis[.mu.-(2,3-dihydroxybutanedioato(4-)-O1,O2:O3, O4)]di-, dipotassium, trihydrate, stereoisomer 28300-74-5	115				

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>	Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	Remove to fresh air. Get medical attention immediately if symptoms occur.
<b>Eye contact</b>	Get immediate medical advice/attention. 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.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a doctor.
<b>Self-protection of the first aider</b>	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** 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** No information available.

chemical

### 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. 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.

**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.

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

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. 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
Sodium metabisulfite 7681-57-4	-	-	TWA: 5 mg/m <sup>3</sup>	-	TWA: 5 mg/m <sup>3</sup>
Molybdate, hexaammonium, tetrahydrate 12054-85-2	-	TWA: 5 mg/m <sup>3</sup> STEL 10 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>	TWA: 5.0 mg/m <sup>3</sup> TWA: 10.0 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>
Antimonate(2-), bis[.mu.-(2,3-dihydroxybu tanedioato(4-)-O1,O2:O3, O4)]di-, dipotassium, trihydrate, stereoisomer 28300-74-5	-	TWA: 0.5 mg/m <sup>3</sup> STEL 1.5 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>	-	TWA: 0.5 mg/m <sup>3</sup>
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Sodium metabisulfite 7681-57-4	-	-	TWA: 5 mg/m <sup>3</sup>	-	-
Molybdate, hexaammonium, tetrahydrate 12054-85-2	-	TWA: 5 mg/m <sup>3</sup> Ceiling: 25 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>
Antimonate(2-), bis[.mu.-(2,3-dihydroxybu tanedioato(4-)-O1,O2:O3, O4)]di-, dipotassium, trihydrate, stereoisomer 28300-74-5	-	TWA: 0.5 mg/m <sup>3</sup> Ceiling: 1.5 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>	-	TWA: 0.5 mg/m <sup>3</sup>
Chemical name	France	Germany	Germany MAK	Greece	Hungary
Sodium metabisulfite 7681-57-4	TWA: 5 mg/m <sup>3</sup>	-	-	TWA: 5 mg/m <sup>3</sup>	-
Molybdate, hexaammonium, tetrahydrate 12054-85-2	TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	-	-	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
Antimonate(2-), bis[.mu.-(2,3-dihydroxybu tanedioato(4-)-O1,O2:O3, O4)]di-, dipotassium, trihydrate, stereoisomer 28300-74-5	TWA: 0.5 mg/m <sup>3</sup>	-	-	TWA: 0.5 mg/m <sup>3</sup>	-
Chemical name	Ireland	Italy	Italy REL	Latvia	Lithuania
Sodium metabisulfite 7681-57-4	TWA: 5 mg/m <sup>3</sup> STEL: 15 mg/m <sup>3</sup>	-	TWA: 5 mg/m <sup>3</sup>	-	-
Molybdate, hexaammonium, tetrahydrate 12054-85-2	TWA: 10 mg/m <sup>3</sup> TWA: 0.5 mg/m <sup>3</sup> STEL: 30 mg/m <sup>3</sup> STEL: 1.5 mg/m <sup>3</sup>	-	TWA: 0.5 mg/m <sup>3</sup>	-	TWA: 5 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>
Antimonate(2-), bis[.mu.-(2,3-dihydroxybu tanedioato(4-)-O1,O2:O3, O4)]di-, dipotassium, trihydrate, stereoisomer 28300-74-5	TWA: 0.5 mg/m <sup>3</sup> STEL: 1.5 mg/m <sup>3</sup>	-	TWA: 0.5 mg/m <sup>3</sup>	-	-
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Sodium metabisulfite 7681-57-4	-	-	-	TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	-
Molybdate, hexaammonium, tetrahydrate 12054-85-2	-	-	-	TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	STEL: 10 mg/m <sup>3</sup> TWA: 4 mg/m <sup>3</sup>
Antimonate(2-), bis[.mu.-(2,3-dihydroxybu tanedioato(4-)-O1,O2:O3, O4)]di-, dipotassium,	-	-	TWA: 0.5 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup> STEL: 1.5 mg/m <sup>3</sup>	-

trihydrate, stereoisomer 28300-74-5					
<b>Chemical name</b>	<b>Portugal</b>	<b>Romania</b>	<b>Slovakia</b>	<b>Slovenia</b>	<b>Spain</b>
Sodium metabisulfite 7681-57-4	TWA: 5 mg/m <sup>3</sup>	-	-	-	TWA: 5 mg/m <sup>3</sup>
Molybdate, hexaammonium, tetrahydrate 12054-85-2	TWA: 0.5 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup> STEL: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	-	TWA: 0.5 mg/m <sup>3</sup>
Antimonate(2-), bis[.mu.-(2,3-dihydroxybu tanedioato(4-)-O1,O2:O3, O4)]di-, dipotassium, trihydrate, stereoisomer 28300-74-5	TWA: 0.5 mg/m <sup>3</sup>	-	TWA: 0.5 mg/m <sup>3</sup>	-	TWA: 0.5 mg/m <sup>3</sup>
<b>Chemical name</b>	<b>Sweden</b>		<b>Switzerland</b>		<b>United Kingdom</b>
Sodium metabisulfite 7681-57-4	-		TWA: 5 mg/m <sup>3</sup>		TWA: 5 mg/m <sup>3</sup> STEL: 15 mg/m <sup>3</sup>
Molybdate, hexaammonium, tetrahydrate 12054-85-2	NGV: 5 mg/m <sup>3</sup> NGV: 10 mg/m <sup>3</sup>		TWA: 5 mg/m <sup>3</sup>		TWA: 5 mg/m <sup>3</sup>
Antimonate(2-), bis[.mu.-(2,3-dihydroxybutanedi oato(4-)-O1,O2:O3,O4)]di-, dipotassium, trihydrate, stereoisomer 28300-74-5	NGV: 0.25 mg/m <sup>3</sup>		-		TWA: 0.5 mg/m <sup>3</sup>

**Biological occupational exposure limits**

<b>Chemical name</b>	<b>Denmark</b>	<b>Finland</b>	<b>France</b>	<b>Germany</b>	<b>Germany MAK</b>
Molybdate, hexaammonium, tetrahydrate 12054-85-2	-	-	-	150 µg/L - BAR (not determined) urine	-

**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.

**Hand protection** Wear suitable gloves.

**Skin and body protection** Wear suitable protective 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** Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

**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	white light yellow
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	No data available	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**

<b>Inhalation</b>	Specific test data for the substance or mixture is not available.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available. Causes serious eye damage. May cause irreversible damage to eyes.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available. May cause irritation.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

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

**Symptoms** Redness. Burning. May cause blindness.

**Numerical measures of toxicity****Acute toxicity**

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

<b>ATEmix (oral)</b>	2,145.30 mg/kg
<b>ATEmix (dermal)</b>	2,019.20 mg/kg

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium metabisulfite	= 1310 mg/kg ( Rat )	> 2000 mg/kg ( Rat )	
Molybdate, hexaammonium, tetrahydrate	= 333 mg/kg ( Rat )		
Antimonate(2-), bis[.mu.-(2,3-dihydroxybutanedioato(4-)-O1,O2:O3,O4)]di-, dipotassium, trihydrate, stereoisomer	= 115 mg/kg ( Rat )		

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

**Skin corrosion/irritation** May cause skin irritation.



**Serious eye damage/eye irritation** Classification based on data available for ingredients. Causes burns. Risk of serious damage to eyes.

**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
Sodium metabisulfite	EC50: =40mg/L (96h, Desmodesmus subspicatus) EC50: =48mg/L (72h, Desmodesmus subspicatus)	LC50: =32mg/L (96h, Lepomis macrochirus)	-	-

**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
Sodium metabisulfite	-3.7

**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
Sodium metabisulfite	The substance is not PBT / vPvB PBT assessment does not apply
Molybdate, hexaammonium, tetrahydrate	The substance is not PBT / vPvB

**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 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
Sodium metabisulfite 7681-57-4	RG 66	-

**Netherlands**

Chemical name	Netherlands - List of Carcinogens	Netherlands - List of Carcinogens	Netherlands - List of Reproductive Toxins
Molybdate, hexaammonium, tetrahydrate	-	-	Fertility Category 2

**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	Complies
IECSC	Complies
KECL	Does not comply

PICCS Complies  
AICS Complies

**Legend:**

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDL - 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**

- EUH031 - Contact with acids liberates toxic gas
- H302 - Harmful if swallowed
- H318 - Causes serious eye damage
- H332 - Harmful if inhaled
- H411 - Toxic to aquatic life with long lasting effects

**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**