

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

### 1.1. Product identifier

**Product Description:** Potassium peroxomonosulfate compound, min. 4.5% active oxygen  
**Cat No. :** 211360000; 211360010; 211360025; 211360050; 211361000  
**Synonyms** Oxone; Potassium monopersulfate; Potassium monopersulfate triple salt  
**CAS No** 70693-62-8  
**EC No** 274-778-7  
**Molecular Formula** H3 K5 O18 S4

### 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

**UK entity/business name**  
Fisher Scientific UK  
Bishop Meadow Road,  
Loughborough, Leicestershire LE11 5RG, United Kingdom

**EU entity/business name**  
Thermo Fisher Scientific  
Janssen Pharmaceuticaaan 3a, 2440 Geel, Belgium

**E-mail address** [begel.sdsdesk@thermofisher.com](mailto:begel.sdsdesk@thermofisher.com)

### 1.4. Emergency telephone number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

**CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567**

#### Physical hazards

Based on available data, the classification criteria are not met

#### Health hazards

# SAFETY DATA SHEET

Potassium peroxomonosulfate compound, min. 4.5% active oxygen

Revision Date 09-Feb-2024

|   |                     |
|---|---------------------|
| Acute oral toxicity                         | Category 4 (H302)   |
| Acute Inhalation Toxicity - Dusts and Mists | Category 4 (H332)   |
| Skin Corrosion/Irritation                   | Category 1 A (H314) |
| Serious Eye Damage/Eye Irritation           | Category 1 (H318)   |
| Respiratory Sensitization                   | Category 1 (H334)   |
| Skin Sensitization                          | Category 1 (H317)   |

## Environmental hazards

|                          |                   |
|--------------------------|-------------------|
| Chronic aquatic toxicity | Category 3 (H412) |
|--------------------------|-------------------|

Full text of Hazard Statements: see section 16

## 2.2. Label elements



Signal Word

Danger

## Hazard Statements

- H302 + H332 - Harmful if swallowed or if inhaled
- H314 - Causes severe skin burns and eye damage
- H317 - May cause an allergic skin reaction
- H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H412 - Harmful to aquatic life with long lasting effects

## Precautionary Statements

- P280 - Wear protective gloves/protective clothing/eye protection/face protection
- P284 - Wear respiratory protection
- P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
- P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower
- P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
- 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/physician

## 2.3. Other hazards

This product does not contain any known or suspected endocrine disruptors

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

| Component  | CAS No     | EC No             | Weight % | CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567 |
|--|------------|-------------------|----------|---|
| Potassium peroxymonosulfate sulfate<br>(K <sub>5</sub> (HSO <sub>3</sub> (O <sub>2</sub> ))(SO <sub>3</sub> (O <sub>2</sub> ))(HSO <sub>4</sub> ) <sub>2</sub> ) | 70693-62-8 | EEC No. 274-778-7 | >85      | Acute Tox. 4 (H302)<br>Skin Corr. 1B (H314)<br>Eye Dam. 1 (H318)                        |

# SAFETY DATA SHEET

Potassium peroxomonosulfate compound, min. 4.5% active oxygen

Revision Date 09-Feb-2024

|                            |           |                   |    |  |
|----------------------------|-----------|-------------------|----|--|
| Potassium persulfate       | 7727-21-1 | EEC No. 231-781-8 | <5 | Aquatic Chronic 3 (H412)<br>Ox. Sol. 3 (H272)<br>Acute Tox. 4 (H302)<br>Skin Irrit. 2 (H315)<br>Skin Sens. 1 (H317)<br>Eye Irrit. 2 (H319)<br>Resp. Sens. 1 (H334)<br>STOT SE 3 (H335) |
| Potassium hydrogen sulfate | 7646-93-7 | EEC No. 231-594-1 | <5 | Skin Corr. 1B (H314)<br>Eye Dam. 1 (H318)<br>STOT SE 3 (H335)  |
| Potassium pyrosulfate      | 7790-62-7 | EEC No. 232-216-8 | <5 | Acute Tox. 3 (H331)<br>Skin Corr. 1A (H314)<br>Eye Dam. 1 (H318)<br>EUH071   |

Full text of Hazard Statements: see section 16

## 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>Eye Contact</b>                        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required. Keep eye wide open while rinsing.  |
| <b>Skin Contact</b>                       | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a physician immediately.  |
| <b>Ingestion</b>                          | Immediate medical attention is required. Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person.   |
| <b>Inhalation</b>                         | Remove to fresh air. If not breathing, give artificial respiration. Call a physician or poison control center 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. |
| <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.   |

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

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

### 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

# SAFETY DATA SHEET

Potassium peroxomonosulfate compound, min. 4.5% active oxygen

Revision Date 09-Feb-2024

## Suitable Extinguishing Media

CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam.

## Extinguishing media which must not be used for safety reasons

Do not use water jetstream.

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

The product causes burns of eyes, skin and mucous membranes. Oxidizer: Contact with combustible/organic material may cause fire. May ignite combustibles (wood paper, oil, clothing, etc.).

## Hazardous Combustion Products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Sulfur oxides, Potassium 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. Thermal decomposition can lead to release of irritating gases and vapors.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing.

### 6.2. Environmental precautions

Should not be released into the environment. Do not allow material to contaminate ground water system. See Section 12 for additional Ecological Information. Avoid release to the environment. Collect spillage. Do not flush into surface water or sanitary sewer system.

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

Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Sweep up and shovel into suitable containers for disposal.

### 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

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance. Keep away from clothing and other combustible materials.

## 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 containers tightly closed in a dry, cool and well-ventilated place. Do not store near combustible materials. Corrosives area. Store under an inert atmosphere. Protect from moisture.

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

Class 8B

# SAFETY DATA SHEET

Potassium peroxomonosulfate compound, min. 4.5% active oxygen

Revision Date 09-Feb-2024

### 7.3. Specific end use(s)

Use in laboratories

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

#### Exposure limits

List source(s): **IRE** - 2021 Code of Practice for the Chemical Agents Regulations, Schedule 1. Published by the Health and Safety Authority

| Component            | The United Kingdom | European Union | Ireland  |
|----------------------|--------------------|----------------|--|
| Potassium persulfate |                    |                | TWA: 0.1 mg/m <sup>3</sup> 8 hr.<br>STEL: 0.3 mg/m <sup>3</sup> 15 min |

#### Biological limit values

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) / Derived Minimum Effect Level (DMEL)

Workers; See table for values

| Component   | Acute effects local (Oral) | Acute effects systemic (Oral) | Chronic effects local (Oral) | Chronic effects systemic (Oral) |
|---|----------------------------|-------------------------------|------------------------------|---------------------------------|
| Potassium peroxymonosulfate sulfate<br>(K5(HSO3(O2))(SO3(O2))(HSO4)2)<br>70693-62-8 (>85) |                            | 10 mg/kg                      |                              |                                 |

| Component   | Acute effects local (Dermal)   | Acute effects systemic (Dermal) | Chronic effects local (Dermal) | Chronic effects systemic (Dermal) |
|---|--------------------------------|---------------------------------|--------------------------------|-----------------------------------|
| Potassium peroxymonosulfate sulfate<br>(K5(HSO3(O2))(SO3(O2))(HSO4)2)<br>70693-62-8 (>85) | DNEL = 0.449mg/cm <sup>2</sup> | DNEL = 80mg/kg bw/day           |                                | DNEL = 20mg/kg bw/day             |
| Potassium persulfate<br>7727-21-1 (<5)  | DNEL = 2.248mg/cm <sup>2</sup> | DNEL = 400mg/kg bw/day          | DNEL = 0.102mg/cm <sup>2</sup> | DNEL = 18.2mg/kg bw/day           |

| Component   | Acute effects local (Inhalation) | Acute effects systemic (Inhalation) | Chronic effects local (Inhalation) | Chronic effects systemic (Inhalation) |
|---|----------------------------------|-------------------------------------|------------------------------------|---------------------------------------|
| Potassium peroxymonosulfate sulfate<br>(K5(HSO3(O2))(SO3(O2))(HSO4)2)<br>70693-62-8 (>85) | DNEL = 50mg/m <sup>3</sup>       | DNEL = 50mg/m <sup>3</sup>          | DNEL = 0.28mg/m <sup>3</sup>       | DNEL = 0.28mg/m <sup>3</sup>          |
| Potassium persulfate<br>7727-21-1 (<5)  |                                  | DNEL = 590mg/m <sup>3</sup>         | DNEL = 2.06mg/m <sup>3</sup>       | DNEL = 2.06mg/m <sup>3</sup>          |
| Potassium pyrosulfate<br>7790-62-7 (<5)   | DNEL = 0.26mg/m <sup>3</sup>     | DNEL = 0.26mg/m <sup>3</sup>        | DNEL = 0.13mg/m <sup>3</sup>       | DNEL = 0.13mg/m <sup>3</sup>          |

#### Predicted No Effect Concentration (PNEC)

See values below.

| Component | Fresh water | Fresh water | Water Intermittent | Microorganisms in | Soil (Agriculture) |
|-----------|-------------|-------------|--------------------|-------------------|--------------------|
|           |             |             |                    |                   |                    |

# SAFETY DATA SHEET

Potassium peroxomonosulfate compound, min. 4.5% active oxygen

Revision Date 09-Feb-2024

|  |                   | sediment                       |                   | sewage treatment |                           |
|--|-------------------|--------------------------------|-------------------|------------------|---------------------------|
| Potassium peroxymonosulfate sulfate (K5(HSO3(O2))(SO3(O2))(HSO4)2)<br>70693-62-8 (>85) | PNEC = 0.022mg/L  | PNEC = 0.0782mg/kg sediment dw | PNEC = 0.0109mg/L | PNEC = 108mg/L   | PNEC = 1mg/kg soil dw     |
| Potassium persulfate<br>7727-21-1 (<5)   | PNEC = 0.0763mg/L | PNEC = 0.275mg/kg sediment dw  | PNEC = 0.763mg/L  | PNEC = 3.6mg/L   | PNEC = 0.015mg/kg soil dw |
| Potassium pyrosulfate<br>7790-62-7 (<5)  | PNEC = 0.68mg/L   | PNEC = 2.5mg/kg sediment dw    | PNEC = 6.8mg/L    | PNEC = 800mg/L   | PNEC = 0.092mg/kg soil dw |

| Component  | Marine water       | Marine water sediment           | Marine water intermittent | Food chain             | Air |
|--|--------------------|---------------------------------|---------------------------|------------------------|-----|
| Potassium peroxymonosulfate sulfate (K5(HSO3(O2))(SO3(O2))(HSO4)2)<br>70693-62-8 (>85) | PNEC = 0.00222mg/L | PNEC = 0.00796mg/kg sediment dw |                           | PNEC = 44.44mg/kg food |     |
| Potassium persulfate<br>7727-21-1 (<5)   | PNEC = 0.011mg/L   | PNEC = 0.0396mg/kg sediment dw  |                           |                        |     |
| Potassium pyrosulfate<br>7790-62-7 (<5)  | PNEC = 0.068mg/L   | PNEC = 0.25mg/kg sediment dw    |                           |                        |     |

## 8.2. Exposure controls

### Engineering Measures

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location. 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

Goggles (European standard - EN 166)

#### Hand Protection

Protective gloves

| Glove material | Breakthrough time                 | Glove thickness | EU standard | Glove comments        |
|----------------|-----------------------------------|-----------------|-------------|-----------------------|
| Butyl rubber   | 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 compatibility, 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

Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

**Recommended Filter type:** Particulates filter conforming to EN 143

#### 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.

# SAFETY DATA SHEET

Potassium peroxomonosulfate compound, min. 4.5% active oxygen

Revision Date 09-Feb-2024

**Recommended half mask:-** Valve filtering: EN405; or; Half mask: EN140; plus filter, EN 141  
When RPE is used a face piece Fit Test should be conducted

**Environmental exposure controls** Prevent product from entering drains.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

|   |                          |  |
|---|--------------------------|--|
| <b>Physical State</b>   | Solid                    |  |
| <b>Appearance</b>   | White                    |  |
| <b>Odor</b>   | Odorless                 |  |
| <b>Odor Threshold</b>   | No data available        |  |
| <b>Melting Point/Range</b>  | No information available |  |
| <b>Softening Point</b>  | No data available        |  |
| <b>Boiling Point/Range</b>  | No information available |  |
| <b>Flammability (liquid)</b>  | Not applicable           | Solid                                    |
| <b>Flammability (solid,gas)</b>                                       | No information available |  |
| <b>Explosion Limits</b>   | No data available        |  |
| <b>Flash Point</b>  | No information available | <b>Method -</b> No information available |
| <b>Autoignition Temperature</b>                                       | No data available        |  |
| <b>Decomposition Temperature</b>                                      | >70 °C                   |  |
| <b>pH</b>   | 2-3                      | 10 g/L aq.sol                            |
| <b>Viscosity</b>  | Not applicable           | Solid                                    |
| <b>Water Solubility</b>   | 298 g/L (20°C)           |  |
| <b>Solubility in other solvents</b>                                   | No information available |  |
| <b>Partition Coefficient (n-octanol/water)</b>                        |                          |  |
| <b>Component</b>  | <b>log Pow</b>           |  |
| Potassium peroxymonosulfate sulfate<br>(K5(HSO3(O2))(SO3(O2))(HSO4)2) | 0.3                      |  |
| <b>Vapor Pressure</b>   | negligible               |  |
| <b>Density / Specific Gravity</b>                                     | No data available        |  |
| <b>Bulk Density</b>   | No data available        |  |
| <b>Vapor Density</b>  | Not applicable           | Solid                                    |
| <b>Particle characteristics</b>                                       | No data available        |  |

### 9.2. Other information

|                             |                        |
|-----------------------------|------------------------|
| <b>Molecular Formula</b>    | H3 K5 O18 S4           |
| <b>Molecular Weight</b>     | 614.78                 |
| <b>Oxidizing Properties</b> | Oxidizer               |
| <b>Evaporation Rate</b>     | Not applicable - Solid |

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

None known, based on information available

### 10.2. Chemical stability

Hygroscopic. Oxidizer: Contact with combustible/organic material may cause fire.

### 10.3. Possibility of hazardous reactions

|                                 |  |
|---------------------------------|--|
| <b>Hazardous Polymerization</b> | Hazardous polymerization does not occur. |
| <b>Hazardous Reactions</b>      | None under normal processing.            |

### 10.4. Conditions to avoid

# SAFETY DATA SHEET

Potassium peroxomonosulfate compound, min. 4.5% active oxygen

Revision Date 09-Feb-2024

Incompatible products. Excess heat. Combustible material. Avoid dust formation. Exposure to moist air or water.

## 10.5. Incompatible materials

Strong oxidizing agents. Strong reducing agents. Combustible material.

## 10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Sulfur oxides. Potassium oxides.

## SECTION 11: TOXICOLOGICAL INFORMATION

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

#### Product Information

##### (a) acute toxicity;

Oral

Category 4

Dermal

Based on available data, the classification criteria are not met

Inhalation

Category 4

#### Toxicology data for the components

| Component  | LD50 Oral                 | LD50 Dermal              | LC50 Inhalation              |
|--|---------------------------|--------------------------|------------------------------|
| Potassium peroxymonosulfate sulfate<br>(K <sub>5</sub> (HSO <sub>3</sub> (O <sub>2</sub> ))(SO <sub>3</sub> (O <sub>2</sub> ))(HSO <sub>4</sub> ) <sub>2</sub> ) | 1204 mg/kg ( Rat )        | > 11000 mg/kg ( Rabbit ) | > 14 mg/L ( Rat ) 1 h        |
| Potassium persulfate   | 802 mg/kg ( Rat )         | > 10000 mg/kg ( Rabbit ) | LC50 > 42.9 mg/L ( Rat ) 1 h |
| Potassium hydrogen sulfate   | LD50 = 2340 mg/kg ( Rat ) | -                        | -                            |

##### (b) skin corrosion/irritation;

Category 1 A

##### (c) serious eye damage/irritation;

Category 1

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

Respiratory

Category 1

Skin

Category 1

No information available

##### (e) germ cell mutagenicity;

No data available

##### (f) carcinogenicity;

No data available

There are no known carcinogenic chemicals in this product

##### (g) reproductive toxicity;

No data available

##### (h) STOT-single exposure;

No data available

##### (i) STOT-repeated exposure;

No data available

Target Organs

No information available.

##### (j) aspiration hazard;

Not applicable  
Solid



# SAFETY DATA SHEET

Potassium peroxomonosulfate compound, min. 4.5% active oxygen

Revision Date 09-Feb-2024

**Symptoms / effects, both acute and delayed** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing.

## 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

The product contains following substances which are hazardous for the environment. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Contains a substance which is: Harmful to aquatic organisms.

| Component  | Freshwater Fish   | Water Flea                         | Freshwater Algae |
|--|---|------------------------------------|------------------|
| Potassium peroxymonosulfate sulfate<br>(K <sub>5</sub> (HSO <sub>3</sub> (O <sub>2</sub> ))(SO <sub>3</sub> (O <sub>2</sub> ))(HSO <sub>4</sub> ) <sub>2</sub> ) | LC50: > 32 mg/L, 96h semi-static<br>(Brachydanio rerio) |                                    |                  |
| Potassium persulfate   | LC50: 100 mg/L/96h<br>(P.reticulata)                    | EC50: 357 mg/L/24H (Daphnia magna) |                  |

| Component  | Microtox             | M-Factor |
|--|----------------------|----------|
| Potassium peroxymonosulfate sulfate<br>(K <sub>5</sub> (HSO <sub>3</sub> (O <sub>2</sub> ))(SO <sub>3</sub> (O <sub>2</sub> ))(HSO <sub>4</sub> ) <sub>2</sub> ) | EC50 = 179 mg/L 18 h |          |

### 12.2. Persistence and degradability

#### Persistence

#### Degradation in sewage treatment plant

Soluble in water, Persistence is unlikely, based on information available. Contains substances known to be hazardous to the environment or not degradable in waste water treatment plants.

### 12.3. Bioaccumulative potential

Bioaccumulation is unlikely

| Component  | log Pow | Bioconcentration factor (BCF) |
|--|---------|-------------------------------|
| Potassium peroxymonosulfate sulfate<br>(K <sub>5</sub> (HSO <sub>3</sub> (O <sub>2</sub> ))(SO <sub>3</sub> (O <sub>2</sub> ))(HSO <sub>4</sub> ) <sub>2</sub> ) | 0.3     | 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 Ozone Depletion Potential

This product does not contain any known or suspected substance  
This product does not contain any known or suspected substance

## SECTION 13: DISPOSAL CONSIDERATIONS

# SAFETY DATA SHEET

Potassium peroxomonosulfate compound, min. 4.5% active oxygen

Revision Date 09-Feb-2024

## 13.1. Waste treatment methods

|  |   |
|--|---|
| <b>Waste from Residues/Unused Products</b> | 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.  |
| <b>Contaminated Packaging</b>              | Dispose of this container to hazardous or special waste collection point.   |
| <b>European Waste Catalogue (EWC)</b>      | According to the European Waste Catalog, Waste Codes are not product specific, but application specific.  |
| <b>Other Information</b>                   | Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Do not flush to sewer. Large amounts will affect pH and harm aquatic organisms. Do not let this chemical enter the environment. |

## SECTION 14: TRANSPORT INFORMATION

### IMDG/IMO

|   |  |
|---|--|
| <b>14.1. UN number</b>                  | UN3260   |
| <b>14.2. UN proper shipping name</b>    | Corrosive solid, acidic, inorganic, n.o.s.                         |
| <b>Technical Shipping Name</b>          | Potassium peroxymonosulfate sulfate (K5(HSO3(O2))(SO3(O2))(HSO4)2) |
| <b>14.3. Transport hazard class(es)</b> | 8  |
| <b>14.4. Packing group</b>              | II   |

### ADR

|   |  |
|---|--|
| <b>14.1. UN number</b>                  | UN3260   |
| <b>14.2. UN proper shipping name</b>    | Corrosive solid, acidic, inorganic, n.o.s.                         |
| <b>Technical Shipping Name</b>          | Potassium peroxymonosulfate sulfate (K5(HSO3(O2))(SO3(O2))(HSO4)2) |
| <b>14.3. Transport hazard class(es)</b> | 8  |
| <b>14.4. Packing group</b>              | II   |

### IATA

|   |  |
|---|--|
| <b>14.1. UN number</b>                  | UN3260   |
| <b>14.2. UN proper shipping name</b>    | Corrosive solid, acidic, inorganic, n.o.s.                         |
| <b>Technical Shipping Name</b>          | Potassium peroxymonosulfate sulfate (K5(HSO3(O2))(SO3(O2))(HSO4)2) |
| <b>14.3. Transport hazard class(es)</b> | 8  |
| <b>14.4. Packing group</b>              | II   |

|  |                                  |
|--|----------------------------------|
| <b>14.5. Environmental hazards</b>                                   | No hazards identified            |
| <b>14.6. Special precautions for user</b>                            | No special precautions required. |
| <b>14.7. Maritime transport in bulk according to IMO instruments</b> | 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/NDL), 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 |
|-----------------------------|------------|-----------|--------|-----|-------|------|----------|------|------|
| Potassium peroxymonosulfate | 70693-62-8 | 274-778-7 | -      | -   | X     | X    | KE-29181 | -    | -    |

# SAFETY DATA SHEET

Potassium peroxomonosulfate compound, min. 4.5% active oxygen

Revision Date 09-Feb-2024

|   |           |           |   |   |   |   |          |   |   |
|---|-----------|-----------|---|---|---|---|----------|---|---|
| sulfate<br>(K5(HSO3(O2))(SO3(O2))(HSO4)2) |           |           |   |   |   |   |          |   |   |
| Potassium persulfate                      | 7727-21-1 | 231-781-8 | - | - | X | X | KE-12177 | X | X |
| Potassium hydrogen sulfate                | 7646-93-7 | 231-594-1 | - | - | X | X | KE-32642 | X | X |
| Potassium pyrosulfate                     | 7790-62-7 | 232-216-8 | - | - | X | X | KE-12142 | - | - |

| Component   | CAS No     | TSCA | TSCA Inventory notification - Active-Inactive | DSL | NDSL | AICS | NZIoC | PICCS |
|---|------------|------|---|-----|------|------|-------|-------|
| Potassium peroxymonosulfate sulfate<br>(K5(HSO3(O2))(SO3(O2))(HSO4)2) | 70693-62-8 | X    | ACTIVE  | X   | -    | X    | X     | X     |
| Potassium persulfate  | 7727-21-1  | X    | ACTIVE  | X   | -    | X    | X     | X     |
| Potassium hydrogen sulfate  | 7646-93-7  | X    | ACTIVE  | X   | -    | X    | X     | X     |
| Potassium pyrosulfate   | 7790-62-7  | X    | ACTIVE  | X   | -    | 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   | CAS No     | 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) |
|---|------------|---|---|---|
| Potassium peroxymonosulfate sulfate<br>(K5(HSO3(O2))(SO3(O2))(HSO4)2) | 70693-62-8 | -   | -   | -   |
| Potassium persulfate  | 7727-21-1  | -   | Use restricted. See item 75.<br>(see link for restriction details)            | -   |
| Potassium hydrogen sulfate  | 7646-93-7  | -   | Use restricted. See item 75.<br>(see link for restriction details)            | -   |
| Potassium pyrosulfate   | 7790-62-7  | -   | -   | -   |

### REACH links

<https://echa.europa.eu/substances-restricted-under-reach>

## Seveso III Directive (2012/18/EC)

| 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 |
|---|------------|---|--|
| Potassium peroxymonosulfate sulfate<br>(K5(HSO3(O2))(SO3(O2))(HSO4)2) | 70693-62-8 | Not applicable  | Not applicable   |
| Potassium persulfate  | 7727-21-1  | Not applicable  | Not applicable   |
| Potassium hydrogen sulfate  | 7646-93-7  | Not applicable  | Not applicable   |
| Potassium pyrosulfate   | 7790-62-7  | 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

## Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?

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 .

# SAFETY DATA SHEET

Potassium peroxomonosulfate compound, min. 4.5% active oxygen

Revision Date 09-Feb-2024

## National Regulations

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

**WGK Classification** Water endangering class = 1 (self classification)

| Component   | Germany - Water Classification (AwSV) | Germany - TA-Luft Class |
|---|---------------------------------------|-------------------------|
| Potassium peroxymonosulfate sulfate<br>(K5(HSO3(O2))(SO3(O2))(HSO4)2) | WGK1                                  |                         |
| Potassium persulfate  | WGK1                                  |                         |
| Potassium hydrogen sulfate  | WGK1                                  |                         |

| Component            | France - INRS (Tables of occupational diseases)             |
|----------------------|---|
| Potassium persulfate | Tableaux des maladies professionnelles (TMP) - RG 65, RG 66 |

## 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

H302 - Harmful if swallowed  
H332 - Harmful if inhaled  
H314 - Causes severe skin burns and eye damage  
H317 - May cause an allergic skin reaction  
H318 - Causes serious eye damage  
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H412 - Harmful to aquatic life with long lasting effects  
H272 - May intensify fire; oxidizer  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H331 - Toxic if inhaled  
H335 - May cause respiratory irritation  
EUH071 - Corrosive to the respiratory tract

### 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/NDL** - 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

# SAFETY DATA SHEET

Potassium peroxomonosulfate compound, min. 4.5% active oxygen

Revision Date 09-Feb-2024

**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**IMO/MDG** - 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.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

Chemical incident response training.

**Creation Date** 04-Feb-2010

**Revision Date** 09-Feb-2024

**Revision Summary** Not applicable.

**This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.**

## 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**