

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

1.1. Product identifier

Product Description:	<u>Oxone®, monopersulfate</u>
Cat No. :	89892
Synonyms	Oxone; Potassium monopersulfate; Potassium monopersulfate triple salt
CAS No	70693-62-8
EC No	274-778-7
Molecular Formula	H3 K5 O18 S4
REACH registration number	-

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	Avocado Research Chemicals Ltd. (Part of Thermo Fisher Scientific) Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom Office Tel: +44 (0) 1524 850506 Office Fax: +44 (0) 1524 850608
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E-mail address	begel.sdsdesk@thermofisher.com
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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

Poison Centre - Emergency information services	Ireland : National Poisons Information Centre (NPIC) - 01 809 2166 (8am-10pm, 7 days a week) Malta : +356 2395 2000 Cyprus : +357 2240 5611
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SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

GHS 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

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Health hazards

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)
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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

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Component	CAS No	EC No	Weight %	GHS Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567
Potassium peroxymonosulfate sulfate (K5(HSO3(O2))(SO3(O2))(HSO4)2)	70693-62-8	EEC No. 274-778-7	>85	Acute Tox. 4 (H302) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)
Potassium pyrosulfate	7790-62-7	EEC No. 232-216-8	<5	Acute Tox. 3 (H331) Skin Corr. 1A (H314) Eye Dam. 1 (H318) EUH071
Potassium persulfate	7727-21-1	EEC No. 231-781-8	<5	Ox. Sol. 3 (H272) Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Eye Irrit. 2 (H319) Resp. Sens. 1 (H334) STOT SE 3 (H335)
Potassium hydrogen sulfate	7646-93-7	EEC No. 231-594-1	<5	Skin Corr. 1B (H314) Eye Dam. 1 (H318) STOT SE 3 (H335)

REACH registration number	-
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Full text of Hazard Statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General Advice	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
Eye Contact	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.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a physician immediately.
Ingestion	Immediate medical attention is required. Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person.
Inhalation	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.
Self-Protection of the First Aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

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

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,

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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

Suitable Extinguishing Media

CO₂, 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 (CO₂), 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

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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 Class 8B
Storage Class (LGK) (Germany)

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 ³ 8 hr. STEL: 0.3 mg/m ³ 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 (K5(HSO3(O2))(SO3(O2))(HSO4)2) 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 (K5(HSO3(O2))(SO3(O2))(HSO4)2) 70693-62-8 (>85)	DNEL = 0.449mg/cm ²	DNEL = 80mg/kg bw/day		DNEL = 20mg/kg bw/day
Potassium persulfate 7727-21-1 (<5)	DNEL = 2.248mg/cm ²	DNEL = 400mg/kg bw/day	DNEL = 0.102mg/cm ²	DNEL = 18.2mg/kg bw/day

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

Predicted No Effect Concentration (PNEC)

See values below.

Component	Fresh water	Fresh water sediment	Water Intermittent	Microorganisms in sewage treatment	Soil (Agriculture)
Potassium peroxymonosulfate sulfate (K5(HSO3(O2))(SO3(O2))(HSO4)2) 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 pyrosulfate 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
Potassium persulfate 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

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

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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.
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

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

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9.2. Other information

Molecular Formula H3 K5 O18 S4
Molecular Weight 614.78
Oxidizing Properties Oxidizer
Evaporation Rate 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

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

10.4. Conditions to avoid

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 (CO₂). 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 (K ₅ (HSO ₃ (O ₂))(SO ₃ (O ₂))(HSO ₄) ₂)	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

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(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

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 (K5(HSO3(O2))(SO3(O2))(HSO4)2)	LC50: > 32 mg/L, 96h semi-static (Brachydanio rerio)		
Potassium persulfate	LC50: 100 mg/L/96h (P.reticulata)	EC50: 357 mg/L/24H (Daphnia magna)	

Component	Microtox	M-Factor
Potassium peroxymonosulfate sulfate (K5(HSO3(O2))(SO3(O2))(HSO4)2)	EC50 = 179 mg/L 18 h	

12.2. Persistence and degradability

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

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Degradation in sewage treatment plant

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 (K5(HSO3(O2))(SO3(O2))(HSO4)2)	<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

13.1. Waste treatment methods

Waste from Residues/Unused Products

Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

Contaminated Packaging

Dispose of this container to hazardous or special waste collection point.

European Waste Catalogue (EWC)

According to the European Waste Catalog, Waste Codes are not product specific, but application specific.

Other Information

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

14.1. UN number

UN3260

14.2. UN proper shipping name

Corrosive solid, acidic, inorganic, n.o.s.

Technical Shipping Name

Potassium peroxymonosulfate sulfate (K5(HSO3(O2))(SO3(O2))(HSO4)2)

14.3. Transport hazard class(es)

8

14.4. Packing group

II

ADR

14.1. UN number

UN3260

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

IATA

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

14.5. Environmental hazards No hazards identified
14.6. Special precautions for user No special precautions required.
14.7. Maritime transport in bulk according to IMO instruments Not applicable, packaged goods

SECTION 15: REGULATORY INFORMATION

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

International Inventories

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

Component	CAS No	EINECS	ELINCS	NLP	IECSC	TCSI	KECL	ENCS	ISHL
Potassium peroxymonosulfate sulfate (K5(HSO3(O2))(SO3(O2))(HSO4)2)	70693-62-8	274-778-7	-	-	X	X	KE-29181	-	-
Potassium pyrosulfate	7790-62-7	232-216-8	-	-	X	X	KE-12142	-	-
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

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Potassium peroxymonosulfate sulfate (K5(HSO3(O2))(SO3(O2))(HSO4)2)	70693-62-8	X	ACTIVE	X	-	X	X	X
Potassium pyrosulfate	7790-62-7	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

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 (K5(HSO3(O2))(SO3(O2))(HSO4)2)	70693-62-8	-	-	-

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Potassium pyrosulfate	7790-62-7	-	-	-
Potassium persulfate	7727-21-1	-	Use restricted. See entry 75. (see link for restriction details)	-
Potassium hydrogen sulfate	7646-93-7	-	Use restricted. See entry 75. (see link for restriction details)	-

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

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 (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

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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

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

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

OECD - Organisation for Economic Co-operation and Development

BCF - Bioconcentration factor

Key literature references and sources for data

<https://echa.europa.eu/information-on-chemicals>

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

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)

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.

SAFETY DATA SHEET

Oxone®, monopersulfate

Revision Date 30-Nov-2024

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

Disclaimer

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End of Safety Data Sheet