

# MATERIAL SAFETY DATA SHEET

## 1. Identification

<b>Product Name</b>	Potassium peroxymonosulfate
<b>CAS No</b>	70693-62-8
<b>Synonyms</b>	Potassium monopersulfate; Potassium monopersulfate triple salt
<b>Recommended Use</b>	Laboratory chemicals.
<b>Uses advised against</b>	Food, drug, pesticide or biocidal product use.
<b><u>Details of the supplier of the safety data sheet</u></b>	

### Company

VISHNUPRIYA CHEMICALS PVT LTD  
Flat No. 203, H. N. 6-3-652/D/28, II Floor, Dhruvatarra,  
Amrutha Estates, Somajiguda, Hyderabad- 500082, Telangana, India  
**Emergency Telephone Number :**  
**040-23225550**

## 2. Hazard(s) identification

### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute oral toxicity	Category 4
Acute Inhalation Toxicity - Dusts and Mists	Category 4
Skin Corrosion/Irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1
Respiratory Sensitization	Category 1
Skin Sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Target Organs - Respiratory system.	

### Label Elements

#### **Signal Word**

Danger

#### **Hazard Statements**

Causes severe skin burns and eye damage  
May cause respiratory irritation  
May cause an allergic skin reaction  
May cause allergy or asthma symptoms or breathing difficulties if inhaled  
Harmful if swallowed or if inhaled



### Precautionary Statements

#### Prevention

Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Use only outdoors or in a well-ventilated area  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 Wear protective gloves/protective clothing/eye protection/face protection  
 In case of inadequate ventilation wear respiratory protection  
 Contaminated work clothing should not be allowed out of the workplace

#### Response

Immediately call a POISON CENTER or doctor/physician

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

#### Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
 Wash contaminated clothing before reuse  
 If skin irritation or rash occurs: Get medical advice/attention

#### Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

#### Ingestion

Do NOT induce vomiting  
 Rinse mouth

#### Storage

Store locked up  
 Store in a well-ventilated place. Keep container tightly closed

#### Disposal

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

Harmful to aquatic life with long lasting effects

### 3. Composition/Information on Ingredients

Component	CAS No	Weight %
OXONE (K5(HSO3(O2))(SO3(O2))(HSO4)2)	70693-62-8	>85
Potassium pyrosulfate	7790-62-7	<5
Potassium persulfate	7727-21-1	<5
Potassium hydrogen sulfate	7646-93-7	<5

### 4. First-aid measures

#### Vishnupriya Chemicals Private Limited

Plot No 122, SEIE, Kattedan,  
 Hyderabad- 500077,  
 Telangana, India

CIN: U24110TG1999PTC031514

+91 40 4020 2121, 4005 5050

info@vishnupriya.in www.vishnupriya.in

<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>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>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>Most important symptoms and effects</b>	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
<b>Notes to Physician</b>	Treat symptomatically

## 5. Fire-fighting measures

<b>Suitable Extinguishing Media</b>	CO <sub>2</sub> , dry chemical, dry sand, alcohol-resistant foam.
<b>Unsuitable Extinguishing Media</b>	No information available
<b>Flash Point</b>	No information available
<b>Method -</b>	No information available
<b>Autoignition Temperature</b>	No information available
<b>Explosion Limits</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Oxidizing Properties</b>	Oxidizer
<b>Sensitivity to Mechanical Impact</b>	No information available
<b>Sensitivity to Static Discharge</b>	No information available

### Specific Hazards Arising from the Chemical

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.

### Protective Equipment and Precautions 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.

---

### Vishnupriya Chemicals Private Limited

Plot No 122, SEIE, Kattedan,  
Hyderabad- 500077,  
Telangana, India

CIN: U24110TG1999PTC031514

+91 40 4020 2121, 4005 5050

info@vishnupriya.in www.vishnupriya.in

**NFPA**

**Health**  
3

**Flammability**  
0

**Instability**  
1

**Physical hazards**  
N/A

**6. Accidental release measures**

**Personal Precautions**

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

**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.

**Methods for Containment and**

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.

**7. Handling and storage**

**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.

**Storage.**

Stored in an ambient condition

**8. Exposure controls / personal protection**

**Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Potassium persulfate	TWA: 0.1 mg/m <sup>3</sup>			TWA: 0.1 mg/m <sup>3</sup>

**Legend**

ACGIH - American Conference of Governm

ental Industrial Hygienists

**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.

**Personal Protective Equipment**

**Eye/face Protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection**

Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

**9. Physical and chemical properties**

<b>Physical State</b>	Granular
<b>Appearance</b>	White
<b>Odor</b>	No Odor
<b>Odor Threshold</b>	No information available
<b>pH</b>	2.1 at 30 g/l at 77°C
<b>Melting Point/Range</b>	Melting point/ range: Decomposes before melting.
<b>Boiling Point/Range</b>	Not applicable
<b>Flash Point</b>	No information available
<b>Evaporation Rate</b>	Not applicable
<b>Flammability (solid, gas)</b>	The product itself does not burn, but it is slightly oxidizing (active oxygen content ca. 2%).
<b>Flammability or explosive limits</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Vapor Pressure</b>	negligible
<b>Vapor Density</b>	Not applicable
<b>Specific Gravity</b>	No information available
<b>Solubility</b>	Soluble in water (357 g/l at 22°C)
<b>Partition coefficient; n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	Not applicable
<b>Decomposition Temperature</b>	No data available
<b>Viscosity</b>	Viscosity, kinematic: No data available Viscosity, dynamic: No data available

**10. Stability and reactivity**

**Reactive Hazard**

None known, based on information available

**Stability**

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

**Vishnupriya Chemicals Private Limited**

Plot No 122, SEIE, Kattedan,  
Hyderabad- 500077,  
Telangana, India

CIN: U24110TG1999PTC031514

+91 40 4020 2121, 4005 5050

info@vishnupriya.in www.vishnupriya.in

<b>Conditions to Avoid</b>	Incompatible products. Excess heat. Combustible material. Avoid dust formation. Exposure to moist air or water.
<b>Incompatible Materials</b>	Strong oxidizing agents, Strong reducing agents, Combustible material
<b>Hazardous Decomposition Products</b>	Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ), Sulfur oxides, Potassium oxides
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Hazardous Reactions</b>	None under normal processing.

## 11. Toxicological information

### Acute Toxicity

#### Product Information

##### Oral LD50

Category 4.

##### Dermal LD50

Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.

##### Mist LC50

Based on ATE data, the classification criteria are not met. ATE > 5 mg/l.

#### Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium peroxymonosulfate sulfate (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 )	Not listed	Not listed

#### Toxicologically Synergistic Products

No information available

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

##### Irritation

Causes burns by all exposure routes

##### Sensitization

No information available

#### Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Potassium peroxymonosulfate sulfate (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	Not listed				
Potassium pyrosulfate	7790-62-7	Not listed				
Potassium persulfate	7727-21-1	Not listed				
Potassium hydrogen sulfate	7646-93-7	Not listed				

#### Mutagenic Effects

No information available

#### Reproductive Effects

No information available.

#### Developmental Effects

No information available. **Teratogenicity** No

information available.

#### Vishnupriya Chemicals Private Limited

Plot No 122, SEIE, Kattedan,  
Hyderabad- 500077,  
Telangana, India

CIN: U24110TG1999PTC031514

+91 40 4020 2121, 4005 5050

info@vishnupriya.in www.vishnupriya.in

**STOT - single exposure** Respiratory system **STOT - repeated exposure** None known

**Aspiration hazard** No information available

**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

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

### Ecotoxicity

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 Algae	Freshwater Fish	Microtox	Water Flea
Potassium peroxymonosulfate sulfate (K5(HSO3(O2))(SO3(O2))(HSO4)2)	Not listed	LC50: > 32 mg/L, 96h semi-static (Brachydanio rerio)	EC50 = 179 mg/L 18 h	Not listed
Potassium persulfate	Not listed	LC50: 100 mg/L/96h (P.reticulata)	Not listed	EC50: 357 mg/L/24H (Daphnia magna)

**Persistence and Degradability** Soluble in water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its water solubility.

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

### DOT UN-

**No** UN3260  
**Proper Shipping Name** Corrosive solid, acidic, inorganic, n.o.s.  
**Technical Name** Potassium peroxymonosulfate sulfate (K5(HSO3(O2))(SO3(O2))(HSO4)2)  
**Hazard Class** 8  
**Packing Group** II

### TDG

**UN-No** UN3260  
**Proper Shipping Name** Corrosive solid, acidic, inorganic, n.o.s.  
**Hazard Class** 8  
**Packing Group** II

### IATA

**UN-No** UN3260  
**Proper Shipping Name** Corrosive solid, acidic, inorganic, n.o.s.

### Vishnupriya Chemicals Private Limited

Plot No 122, SEIE, Kattedan,  
Hyderabad- 500077,  
Telangana, India

CIN: U24110TG1999PTC031514

+91 40 4020 2121, 4005 5050

info@vishnupriya.in www.vishnupriya.in

<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>IMDG/IMO UN-</b>	
<b>No</b>	UN3260
<b>Proper Shipping Name</b>	Corrosive solid, acidic, inorganic, n.o.s.
<b>Hazard Class</b>	8
<b>Packing Group</b>	II

### 15. Regulatory information

#### United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification Active-Inactive	TSCA – EPA Regulatory Flags
Potassium peroxymonosulfate sulfate (K5(HSO3(O2))(SO3(O2))(HSO4)2)	70693-62-8	X	ACTIVE	-
Potassium pyrosulfate	7790-62-7	X	ACTIVE	-
Potassium persulfate	7727-21-1	X	ACTIVE	-
Potassium hydrogen sulfate	7646-93-7	X	ACTIVE	-

**Legend:**

**TSCA** US EPA (TSCA) – Toxic Substances Control Act, (40 CFR Part 710)

X – Listed

'-' – Not Listed

**TSCA 12(b)** – Notices of Export Not applicable

#### International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Potassium peroxymonosulfate sulfate (K5(HSO3(O2))(SO3(O2))(HSO4)2)	70693-62-8	X	-	274-778-7	X	-		X	X	KE-29181
Potassium pyrosulfate	7790-62-7	X	-	232-216-8	X	-		X	X	KE-12142
Potassium persulfate	7727-21-1	X	-	231-781-8	X	X	X	X	X	KE-12177
Potassium hydrogen sulfate	7646-93-7	X	-	231-594-1	X	X	X	X	X	KE-32642

**KECL** – NIER number or KE number (<http://ncis.nier.gov.kr/en/main.do>)

#### U.S. Federal Regulations

**SARA 313** Not applicable

**SARA 311/312 Hazard Categories** See section 2 for more information

**CWA (Clean Water Act)** Not applicable

**Clean Air Act** Not applicable

#### Vishnupriya Chemicals Private Limited

Plot No 122, SEIE, Kattedan,  
Hyderabad- 500077,  
Telangana, India

CIN: U24110TG1999PTC031514

+91 40 4020 2121, 4005 5050

info@vishnupriya.in www.vishnupriya.in

**OSHA** – Occupational Safety and Administration Not applicable Health

**CERCLA** Not applicable

**California Proposition 65** This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Potassium persulfate	X	X	X	-	X
Potassium hydrogen sulfate	-	X	-	-	-

**U.S. Department of Transportation**

Reportable Quantity (RQ): N  
DOT Marine Pollutant N DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security** This product does not contain any DHS chemicals. **Security**

**Other International Regulations**

**Mexico – Grade** No information available

**Authorisation/Restrictions according to EU REACH**

Component	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 persulfate	-	Use restricted. See item 75. (see link for restriction details)	-
Potassium hydrogen sulfate	-	Use restricted. See item 75. (see link for restriction details)	-

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

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

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Potassium peroxydisulfate (K <sub>2</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	Listed	Not applicable	Not applicable	Not applicable
Potassium pyrosulfate	7790-62-7	Not applicable	Not applicable	Not applicable	Not applicable
Potassium persulfate	7727-21-1	Listed	Not applicable	Not applicable	Not applicable
Potassium hydrogen sulfate	7646-93-7	Not applicable	Not applicable	Not applicable	Not applicable
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	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)

**Vishnupriya Chemicals Private Limited**

Plot No 122, SEIE, Kattedan,  
Hyderabad- 500077,  
Telangana, India

CIN: U24110TG1999PTC031514

+91 40 4020 2121, 4005 5050

info@vishnupriya.in www.vishnupriya.in

Potassium peroxy monosulfate sulfate (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	Not applicable	Not applicable	Not applicable	Not applicable
Potassium pyrosulfate	7790-62-7	Not applicable	Not applicable	Not applicable	Not applicable
Potassium persulfate	7727-21-1	Not applicable	Not applicable	Not applicable	Not applicable
Potassium hydrogen sulfate	7646-93-7	Not applicable	Not applicable	Not applicable	Not applicable

## 16. Other information

Prepared By : VISHNUPRIYA CHEMICALS PVT LTD

Issue Date: 02/02/2024

We recommend our safety data sheet updation/revision service in all cases when there was a change in the content of the safety data sheet or if a change in the legal environment makes it necessary.

Revision Summary This document has been updated to comply with the ISO 11014:2009.

### 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 SDS**