SIGMA-ALDRICH

Material Safety Data Sheet

Version 3.0 Revision Date 10/20/2009 Print Date 09/14/2011

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : OXONE[®], monopersulfate compound

Product Number : 228036

Brand : Sigma-Aldrich

Company : Sigma-Aldrich

3050 Spruce Street SAINT LOUIS MO 63103

USA

Telephone : +1 800-325-5832 Fax : +1 800-325-5052 Emergency Phone # : (314) 776-6555

2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Potassium peroxymonosulfate

Formula : $HKO_5S \cdot 0.5HKO_4S \cdot 0.5K_2O_4S$

CAS-No.	EC-No.	Index-No.	Concentration
Potassium hydrog	ensulphate		
7646-93-7	231-594-1	016-056-00-4	23 %
Dipotassium perox	xodisulphate		
7727-21-1	231-781-8	016-061-00-1	3 %
Magnesium carbo	nate		
546-93-0	208-915-9	-	2 %
Potassium hydrog	enperoxomonosulphate		
10058-23-8	233-187-4	-	43 %
Potassium sulfate			
7778-80-5	231-915-5	- 29 %	

3. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards

Oxidizer, Harmful by ingestion., Skin and respiratory sensitizer, Corrosive

HMIS Classification

Health hazard: 3 Chronic Health Hazard: * Flammability: 0 Physical hazards: 1

NFPA Rating

Health hazard: 3
Fire: 0
Reactivity Hazard: 1
Special hazard.: OX

Potential Health Effects

Inhalation May be harmful if inhaled. Material is extremely destructive to the tissue of the

mucous membranes and upper respiratory tract.

Skin May be harmful if absorbed through skin. Causes skin burns.

Eyes Causes eye burns.

Ingestion Harmful if swallowed. Causes burns.

4. FIRST AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Continue rinsing eyes during transport to hospital. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Flammable properties

Flash point not applicable

Ignition temperature no data available

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

Further information

Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions

Do not let product enter drains.

Methods for cleaning up

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Handling

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Keep away from combustible material.

Storage

Keep container tightly closed in a dry and well-ventilated place.

hygroscopic

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
Magnesium carbonate	546-93-0	TWA	15 mg/m3	2007-01-01	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		TWA	5 mg/m3	2007-01-01	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		TWA	15 mg/m3	1989-01-19	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
		TWA	5 mg/m3	1989-01-19	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves.

Eye protection

Face shield and safety glasses

Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form crystalline

Colour white

Safety data

pH 2 at 30 g/l at 77 °C (171 °F)

Melting point no data available
Boiling point no data available

Flash point not applicable
Ignition temperature no data available
Lower explosion limit no data available
Upper explosion limit no data available
Density 1.100 - 1.400 g/cm3

Water solubility soluble

10. STABILITY AND REACTIVITY

Storage stability

Stable under recommended storage conditions.

Materials to avoid

Strong bases, Acids, Bases, Powdered metals, Strong oxidizing agents, Organic materials, Alcohols, acids, phosphorous, Halogens, Anhydrides, Phosphorus, Strong reducing agents

11. TOXICOLOGICAL INFORMATION

Acute toxicity

no data available

Irritation and corrosion

no data available

Sensitisation

no data available

Chronic exposure

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as

a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as

a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as

a carcinogen or potential carcinogen by OSHA.

Signs and Symptoms of Exposure

spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache

Potential Health Effects

Inhalation May be harmful if inhaled. Material is extremely destructive to the tissue of the

mucous membranes and upper respiratory tract.

Skin May be harmful if absorbed through skin. Causes skin burns.

Eyes Causes eye burns.

Ingestion Harmful if swallowed. Causes burns.

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

no data available

Ecotoxicity effects

no data available

Further information on ecology

no data available

13. DISPOSAL CONSIDERATIONS

Product

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

UN-Number: 3215 Class: 5.1 Packing group: III

Proper shipping name: Persulfates, inorganic, n.o.s.

Marine pollutant: No

Poison Inhalation Hazard: No

IMDG

UN-Number: 3215 Class: 5.1 Packing group: III EMS-No: F-A, S-Q

Proper shipping name: PERSULPHATES, INORGANIC, N.O.S.

Marine pollutant: No

IATA

UN-Number: 3215 Class: 5.1 Packing group: III

Proper shipping name: Persulphates, inorganic n.o.s.

15. REGULATORY INFORMATION

OSHA Hazards

Oxidizer, Harmful by ingestion., Skin and respiratory sensitizer, Corrosive

DSL Status

All components of this product are on the Canadian DSL list.

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III. Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Reactivity Hazard, Acute Health Hazard

Massachusetts Right To Know Components

	CAS-No.	Revision Date
Dipotassium peroxodisulphate	7727-21-1	2007-03-01
Magnesium carbonate	546-93-0	2007-03-01
Pennsylvania Right To Know Components		
	CAS-No.	Revision Date
Dipotassium peroxodisulphate	7727-21-1	2007-03-01
Potassium hydrogensulphate	7646-93-7	2007-03-01
Potassium sulfate	7778-80-5	
Potassium hydrogenperoxomonosulphate	10058-23-8	
New Jersey Right To Know Components		
	CAS-No.	Revision Date
Dipotassium peroxodisulphate	7727-21-1	2007-03-01
Magnesium carbonate	546-93-0	2007-03-01
Potassium hydrogensulphate	7646-93-7	2007-03-01
Potassium sulfate	7778-80-5	
Potassium hydrogenperoxomonosulphate	10058-23-8	

California Prop. 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

16. OTHER INFORMATION

Further information

Copyright 2009 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Co., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.