

## Material Safety Data Sheet

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Date Updated: 13/MAR/2004  
Version 1.3  
According to 91/155/EEC

Classified as Hazardous according to the criteria of EU Annex 1 and NOHSC.

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#### 1 - Product and Company Information

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Product Name	SODIUM PEROXODISULFATE
Product Number	13457
Company	Sigma-Aldrich Pty, Ltd Unit 2, 14 Anella Avenue Castle Hill NSW 1765 Australia
Technical Phone #	+61 2 9841 0555
Fax	+61 2 9841 0500
Emergency Phone #	+61 2 9841 0566

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#### 2 - Composition/Information on Ingredients

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Product Name	CAS #	EC no	Annex I Index Number
SODIUM PEROXODISULFATE	7775-27-1	231-892-1	None
Formula	Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub>		
Molecular Weight	238.1 AMU		
Synonyms	Persulfate de sodium (French) * Sodium peroxydisulfate		

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#### 3 - Hazards Identification

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##### SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT

Contact with combustible material may cause fire. Harmful if swallowed. May cause sensitization by inhalation and skin contact.

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#### 4 - First Aid Measures

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##### AFTER INHALATION

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

##### AFTER SKIN CONTACT

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

##### AFTER EYE CONTACT

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

##### AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

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## 5 - Fire Fighting Measures

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### EXTINGUISHING MEDIA

Suitable: Water spray.

### SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions. Contact with other material may cause fire. May accelerate combustion.

Explosion Hazards: Container explosion may occur under fire conditions.

### SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

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## 6 - Accidental Release Measures

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### PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area.

### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

### METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

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## 7 - Handling and Storage

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### HANDLING

Directions for Safe Handling: Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

### STORAGE

Conditions of Storage: Keep tightly closed. Keep away from combustible materials, heat, sparks, and open flame.

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## 8 - Exposure Controls / Personal Protection

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### ENGINEERING CONTROLS

Use only in a chemical fume hood. Safety shower and eye bath.

### GENERAL HYGIENE MEASURES

Wash thoroughly after handling. Remove and wash contaminated clothing promptly. Discard contaminated shoes.

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### EXPOSURE LIMITS - DENMARK

Source	Type	Value
OEL	TWA	2 mg/m <sup>3</sup>

### EXPOSURE LIMITS - UNITED KINGDOM

Source	Type	Value
OEL	TWA	1 mg/m <sup>3</sup>

### PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Government approved respirator.

Hand Protection: Compatible chemical-resistant gloves.

Eye Protection: Chemical safety goggles.

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## 9 - Physical and Chemical Properties

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Appearance	Physical State: Solid Color: White Form: Fine crystals	
Property	Value	At Temperature or Pressure
pH	2.5 - 4	
BP/BP Range	N/A	
MP/MP Range	N/A	
Flash Point	N/A	
Flammability	N/A	
Autoignition Temp	N/A	
Oxidizing Properties	N/A	
Explosive Properties	N/A	
Explosion Limits	N/A	
Vapor Pressure	N/A	
SG/Density	2.4 g/cm <sup>3</sup>	
Partition Coefficient	N/A	
Viscosity	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
Evaporation Rate	N/A	
Bulk Density	N/A	
Decomposition Temp.	N/A	
Solvent Content	N/A	
Water Content	N/A	
Surface Tension	N/A	
Conductivity	N/A	
Miscellaneous Data	N/A	
Solubility	Solubility in Water: 1 M in H <sub>2</sub> O, 20°C complete, colorless	

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## 10 - Stability and Reactivity

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### STABILITY

Stable: Stable.

Conditions to Avoid: Moisture.

Materials to Avoid: Alcohols, Strong reducing agents, Finely powdered metals, Strong bases, Avoid contact with organics.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Sulfur oxides, Sodium/sodium oxides.

### HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

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## 11 - Toxicological Information

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RTECS NUMBER: SE0525000

### ACUTE TOXICITY

LD50

Oral

rat, female

920 mg/kg

LD50

Oral

rat, male

930 mg/kg  
LD50  
Skin  
Rabbit  
> 10,000 mg/kg  
LC50  
Inhalation  
Rat  
> 5,100 mg/m<sup>3</sup>  
4 H

LD50  
Intraperitoneal  
Mouse  
226 MG/KG

#### IRRITATION DATA

Skin  
Rabbit  
Remarks: No irritation effect  
Eyes  
Rabbit  
Remarks: No irritation effect

#### SENSITIZATION

Sensitization: May cause allergic reaction.

#### SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.  
Skin Absorption: May be harmful if absorbed through the skin.  
Eye Contact: May cause eye irritation.  
Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.  
Ingestion: Harmful if swallowed.

#### CHRONIC EXPOSURE - MUTAGEN

Mutation test: Histidine reversion (Ames)

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#### 12 - Ecological Information

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#### ECOTOXICOLOGICAL EFFECTS

Test Type: EC50 Daphnia  
Species: Daphnia magna  
Time: 48 h  
Value: 133 mg/l

Test Type: LC50 Fish  
Species: Lepomis macrochirus (Bluegill)  
Time: 96 h  
Value: 771 mg/l

Test Type: LC50 Fish  
Species: Onchorhynchus mykiss (Rainbow trout)  
Time: 96 h  
Value: 163 mg/l

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#### 13 - Disposal Considerations

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## SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations.

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## 14 - Transport Information

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### RID/ADR

UN#: 1505  
Class: 5.1  
PG: III  
Proper Shipping Name: Sodium persulphate

### IMDG

UN#: 1505  
Class: 5.1  
PG: III  
Proper Shipping Name: Sodium persulphate  
Marine Pollutant: No  
Severe Marine Pollutant: No

### IATA

UN#: 1505  
Class: 5.1  
PG: III  
Proper Shipping Name: Sodium persulphate  
Inhalation Packing Group I: No

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## 15 - Regulatory Information

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### CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

INDICATION OF DANGER: O Xn

Oxidizing. Harmful.

R-PHRASES: 8 22 42/43

Contact with combustible material may cause fire. Harmful if swallowed. May cause sensitization by inhalation and skin contact.

S-PHRASES: 16 17 22 26 36/37 45

Keep away from sources of ignition - no smoking. Keep away from combustible material. Do not breathe dust. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing and gloves. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

### COUNTRY SPECIFIC INFORMATION

#### Germany

WGK: 1

#### SWITZERLAND

SWISS POISON CLASS: 4

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## 16 - Other Information

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### WARRANTY

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

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