

Material Safety Data Sheet

acc. to OSHA and ANSI

Printing date 11/11/2008

Reviewed on 11/11/2008

1 Identification of substance:

Product details:

Product name: Sodium peroxide

Stock number: L13306

Manufacturer/Supplier:

Alfa Aesar, A Johnson Matthey Company
 Johnson Matthey Catalog Company, Inc.
 30 Bond Street
 Ward Hill, MA 01835-8099
 Emergency Phone: (978) 521-6300
 CHEMTREC: (800) 424-9300
 Web Site: www.alfa.com

Information Department: Health, Safety and Environmental Department

Emergency information:

During normal hours the Health, Safety and Environmental Department.
 After normal hours call Chemtrec at (800) 424-9300.

2 Composition/Data on components:

Chemical characterization:

Description: (CAS#)

Sodium peroxide (CAS# 1313-60-6): 95-99%

Sodium hydroxide (CAS# 1310-73-2): 1-5%

3 Hazards identification

Hazard description:



C Corrosive
 O Oxidizing

Information pertaining to particular dangers for man and environment

R 8 Contact with combustible material may cause fire.

R 35 Causes severe burns.

Classification system

HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

HEALTH	3	Health (acute effects) = 3
FIRE	0	Flammability = 0
REACTIVITY	3	Reactivity = 3

4 First aid measures

General information

Immediately remove any clothing soiled by the product.

After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm.

Seek immediate medical advice.

After skin contact

Immediately wash with water and soap and rinse thoroughly.

Seek immediate medical advice.

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After eye contact

Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing Seek immediate medical advice.

5 Fire fighting measures

Suitable extinguishing agents Extinguishing powder. Do not use water.

For safety reasons unsuitable extinguishing agents Water

Special hazards caused by the material, its products of combustion or resulting gases:

This substance is an oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition.

Protective equipment:

Wear self-contained respirator.

Wear fully protective impervious suit.

6 Accidental release measures

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Measures for environmental protection:

Do not allow material to be released to the environment without proper governmental permits.

Measures for cleaning/collecting:

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Additional information:

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling**Information for safe handling:**

Handle under dry argon.

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

Ensure good ventilation at the workplace.

Open and handle container with care.

Information about protection against explosions and fires:

Substance/product can reduce the ignition temperature of flammable substances.

This substance is an oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition.

Storage**Requirements to be met by storerooms and receptacles:**

No special requirements.

Information about storage in one common storage facility:

Store away from water/moisture.

Store away from flammable substances.

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Store away from reducing agents.

Do not store together with acids.

Further information about storage conditions:

Protect from humidity and water.

Store under dry inert gas.

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

8 Exposure controls and personal protection**Additional information about design of technical systems:**

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Components with limit values that require monitoring at the workplace:

Sodium hydroxide

mg/m³

ACGIH TLV 2-CEILING

Austria MAK 2

Belgium 2-STEL

Denmark TWA 2

Finland TWA 2

France VME 2

Germany MAK 2

Ireland TWA 2-STEL

Japan OEL 2

Korea TLV 2-Ceiling

Netherlands MAC-TGG 2

Norway TWA 2

Poland TWA 0.5; 1-STEL

Sweden TGV 2

Switzerland MAK-W 2; 4-KZG-W

United Kingdom TWA 2-STEL

OSHA PEL 2

Additional information: No data**Personal protective equipment****General protective and hygienic measures**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Breathing equipment:

Use suitable respirator when high concentrations are present.

Protection of hands: Impervious gloves**Eye protection:**

Safety glasses

Tightly sealed goggles

Full face protection

Body protection: Protective work clothing.

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9 Physical and chemical properties:

General Information	
Form:	Powder
Color:	Light yellow
Odor:	Odorless
Change in condition	
Melting point/Melting range:	460°C (860°F) ((dec))
Boiling point/Boiling range:	Not determined
Sublimation temperature / start:	Not determined
Flash point:	Not applicable
Flammability (solid, gaseous)	Contact with combustible material may cause fire.
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
Explosion limits:	
Lower:	Not determined
Upper:	Not determined
Vapor pressure:	Not determined
Density at 20°C (68°F):	2.805 g/cm ³

10 Stability and reactivity

Thermal decomposition / conditions to be avoided:

Decomposition will not occur if used and stored according to specifications.

Materials to be avoided:

Water/moisture
 Reducing agents, easily oxidized materials
 Metal powders
 Acids
 Acid anhydrides
 Sulfur
 Sulfides
 Alcohols

Dangerous reactions

Reacts with reducing agents
 Reacts with flammable substances

Dangerous products of decomposition: Metal oxide fume

11 Toxicological information

Acute toxicity:

**Primary irritant effect:
 on the skin:**

Strong corrosive effect on skin and mucous membranes.
 Irritant to skin and mucous membranes.

on the eye:

Strong corrosive effect.
 Irritating effect.

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Sensitization: No sensitizing effects known.

Subacute to chronic toxicity:

Sodium peroxide is corrosive to the skin, eyes and mucous membranes.

Subacute to chronic toxicity:

Sodium hydroxide, both solid and in solution, is corrosive to all body tissues causing burns, and possibly ulceration and scarring. Dilute solutions have a less irritating effect.

Corrosive materials are acutely destructive to the respiratory tract, eyes, skin and digestive tract. Eye contact may result in permanent damage and complete vision loss. Inhalation may result in respiratory effects such as inflammation, edema, and chemical pneumonitis. May cause coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. Ingestion may cause damage to the mouth, throat and esophagus. May cause skin burns or irritation depending on the severity of the exposure.

Additional toxicological information:

Swallowing will lead to a strong corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach.

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

12 Ecological information:

General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Do not allow material to be released to the environment without proper governmental permits.

13 Disposal considerations

Product:

Recommendation

Consult state, local or national regulations to ensure proper disposal.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

14 Transport information

DOT regulations:



Hazard class:	5.1
Identification number:	UN1504
Packing group:	I
Proper shipping name (technical name):	SODIUM PEROXIDE

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Label 5.1

Land transport ADR/RID (cross-border)



ADR/RID class: 5.1 (O2) Oxidizing substances
Danger code (Kemler): -
UN-Number: 1504
Packaging group: I
Description of goods: 1504 SODIUM PEROXIDE

Maritime transport IMDG:



IMDG Class: 5.1
UN Number: 1504
Label 5.1
Packaging group: I
Proper shipping name: SODIUM PEROXIDE

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: 5.1
UN/ID Number: 1504
Label 5.1
Packaging group: I
Proper shipping name: SODIUM PEROXIDE

15 Regulations

Product related hazard informations:

Hazard symbols:

C Corrosive
 O Oxidizing

Risk phrases:

8 Contact with combustible material may cause fire.
 35 Causes severe burns.

Safety phrases:

8 Keep container dry.
 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 27 Take off immediately all contaminated clothing.
 37/39 Wear suitable gloves and eye/face protection.

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45 In case of accident or if you feel unwell, seek medical advice immediately.

National regulations

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

Information about limitation of use:

For use only by technically qualified individuals.

16 Other information:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing MSDS: Health, Safety and Environmental Department.

Contact: Paul V. Connolly