

SECTION 1: Identification

1.1. Product identifier

Trade name : SODIUM PEROXIDE
 EC-No. : 215-209-4
 EC Index-No. : 011-003-00-1
 CAS-No. : 1313-60-6
 UN-No. (ADR) : 1504
 Product code : 119240xxx
 Formula : Na₂O₂

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended uses and restrictions : For laboratory use only

1.3. Supplier's details

Labchem (Pty)Ltd
 6 Wakefield Road
 Founders Hill
 1609 Johannesburg - South Africa
 T +27 11 452 1116 - F +27 86 588 0293
techlab@labchem.co.za - www.labchem.co.za

1.4. Emergency telephone number

Emergency number : +27 11 452 1116

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Oxidising Solids, Category 1 H271

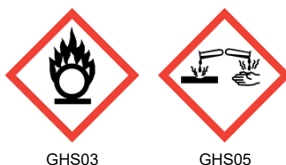
Skin corrosion/irritation, Category 1A H314

Full text of H statements : see section 16

2.2. Label elements

Labelling according to the United Nations GHS

Hazard pictograms (GHS-ZA) :



Signal word (GHS-ZA) : Danger

Hazard statements (GHS-ZA) : H271 - May cause fire or explosion; strong oxidiser.
 H314 - Causes severe skin burns and eye damage.

Precautionary statements (GHS-ZA) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P220 - Keep away from clothing and other combustible materials.
 P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
 P264 - Wash hands, forearms and face thoroughly after handling.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 P283 - Wear fire resistant or flame retardant clothing.
 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/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.
 P306+P360 - IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
 P310 - Immediately call a POISON CENTER or doctor.
 P321 - Specific treatment (see supplemental first aid instruction on this label).
 P363 - Wash contaminated clothing before reuse.
 P370+P378 - In case of fire: Use media other than water to extinguish.
 P371+P380+P375 - In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
 P405 - Store locked up.
 P420 - Store separately.

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According to SANS 10234:2008 and SANS 11014:2010

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Adverse physicochemical, human health and environmental effects : Causes severe skin burns and eye damage.

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance identification codes: See section 1.1

| Name | Product identifier | % | Classification according to the United Nations GHS |
|---------------------------------------|---------------------|------|--|
| sodium peroxide (Main constituent) | (CAS-No.) 1313-60-6 | ≥ 99 | Ox. Sol. 1, H271 Skin Corr. 1A, H314 |

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------------------------|---|
| First-aid measures general | : Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital. Call a physician immediately. |
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. Remove the victim into fresh air. Doctor: administration of corticoid spray. Respiratory problems: consult a doctor/medical service. |
| First-aid measures after skin contact | : Wash immediately with lots of water (15 minutes)/shower. Do not apply (chemical) neutralizing agents without medical advice. Remove clothing while washing. Do not remove clothing if it sticks to the skin. Cover wounds with sterile bandage. Consult a doctor/medical service. If burned surface > 10%: take victim to hospital. Rinse skin with water/shower. Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Take off immediately all contaminated clothing. Call a physician immediately. |
| First-aid measures after eye contact | : Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply (chemical) neutralizing agents without medical advice. Take victim to an ophthalmologist. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately. |
| First-aid measures after ingestion | : Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Do not apply (chemical) neutralizing agents without medical advice. Immediately consult a doctor/medical service. Call Poison Information Centre (www.big.be/antigif.html). Ingestion of large quantities: immediately to hospital. Take the container/vomit to the doctor/hospital. Doctor: gastric lavage. Rinse mouth. Do not induce vomiting. Call a physician immediately. |

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

| | |
|---|--|
| Symptoms/effects after inhalation | : AFTER INHALATION OF DUST: Dry/sore throat. Coughing. Respiratory difficulties. FOLLOWING SYMPTOMS MAY APPEAR LATER: Risk of lung oedema. |
| Symptoms/effects after skin contact | : Caustic burns/corrosion of the skin. Slow-healing wounds. Burns. |
| Symptoms/effects after eye contact | : Corrosion of the eye tissue. Serious damage to eyes. |
| Symptoms/effects after ingestion | : Abdominal pain. Blood in vomit. Possible esophageal perforation. Burns to the gastric/intestinal mucosa. Burns. |
| Chronic symptoms | : No effects known. |
| Potential adverse human health effects and symptoms | : Causes severe skin burns. Causes serious eye damage. |

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|--------------------------------|---|
| Suitable extinguishing media | : Water. Quick-acting ABC powder extinguisher. Quick-acting CO2 extinguisher. Quantities of water. Water spray. Dry powder. Foam. |
| Unsuitable extinguishing media | : Foam. Foam. |

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According to SANS 10234:2008 and SANS 11014:2010

5.2. Special hazards arising from the substance or mixture

- Fire hazard : DIRECT FIRE HAZARD: Non combustible. INDIRECT FIRE HAZARD: May cause fire or explosion; strong oxidiser. Reactions involving a fire hazard: see "Reactivity Hazard". May cause fire or explosion; strong oxidiser.
- Explosion hazard : INDIRECT EXPLOSION HAZARD: Reactions with explosion hazards: see "Reactivity Hazard".
- Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

- Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighbourhood close doors and windows.
- Firefighting instructions : Cool tanks/drums with water spray/remove them into safety. When cooling/extinguishing: no water in the substance. Do not move the load if exposed to heat. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
- Protection during firefighting : Heat/fire exposure: compressed air/oxygen apparatus. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.1.1. For non-emergency personnel

- Protective equipment : Gloves. Face shield. Corrosion-proof suit. Dust cloud production: compressed air/oxygen apparatus.
- Emergency procedures : Ventilate spillage area. Mark the danger area. Prevent dust cloud formation. No naked flames. Keep containers closed. Avoid ingress of water in the containers. Wash contaminated clothes. On contact with moisture/water: keep upwind. On contact with moisture/water: consider evacuation. In case of reactivity hazard: consider evacuation. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Prevent soil and water pollution. Prevent spreading in sewers.

6.3. Methods and material for containment and cleaning up

- For containment : Contain released product, pump into suitable containers. Plug the leak, cut off the supply. Dam up the solid spill. Knock down/dilute dust cloud with water spray. Take account of toxic/corrosive precipitation water.
- Methods for cleaning up : Mechanically recover the product. Stop dust cloud by covering with sand/earth or dry powdered limestone or soda ash. Solid spill: shovel into dry and closing drums. Carefully collect the spill/leftovers. Spill must not return in its original container. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling. Notify authorities if product enters sewers or public waters.
- Other information : Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid raising dust. Keep away from naked flames/heat. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Keep the substance free from contamination. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Avoid contact of substance with water. Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.
- Hygiene measures : Observe very strict hygiene - avoid contact. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.
- Storage area : Store in a cool area. Store in a dry area. Keep container in a well-ventilated place. Fireproof storeroom. Keep locked up. Unauthorized persons are not admitted. Keep only in the original container. Meet the legal requirements.
- Incompatible materials : combustible materials.
- Heat and ignition sources : KEEP SUBSTANCE AWAY FROM: heat sources.

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According to SANS 10234:2008 and SANS 11014:2010

| | |
|------------------------------|---|
| Information on mixed storage | : KEEP SUBSTANCE AWAY FROM: combustible materials. reducing agents. (strong) acids. organic materials. alcohols. water/moisture. |
| Special rules on packaging | : SPECIAL REQUIREMENTS: hermetical. watertight. dry. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers. |
| Packaging materials | : SUITABLE MATERIAL: steel. iron. synthetic material. glass. tin. MATERIAL TO AVOID: aluminium. copper. tin. zinc. paper. cardboard. wood. |

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

| | |
|----------------------------------|--|
| Appropriate engineering controls | : Ensure good ventilation of the work station. |
| Environmental exposure controls | : Avoid release to the environment. |

8.3. Individual protection measures, such as personal protective equipment (PPE)

| | |
|-----------------------------------|---|
| Materials for protective clothing | : GIVE EXCELLENT RESISTANCE: butyl rubber. PVC. viton. GIVE GOOD RESISTANCE: chlorosulfonated polyethylene. neoprene. GIVE POOR RESISTANCE: leather |
| Hand protection | : Gloves |
| Eye protection | : Face shield. In case of dust production: protective goggles |
| Skin and body protection | : Corrosion-proof clothing. In case of dust production: head/neck protection. In case of dust production: dustproof clothing |
| Respiratory protection | : Dust production: dust mask with filter type P3. High dust production: self-contained breathing apparatus |

Personal protective equipment symbol(s):



8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|--|
| Physical state | : Solid |
| Appearance | : Crystalline solid. Crystalline powder. |
| Molecular mass | : 78.98 g/mol |
| Colour | : White to yellow. |
| Odour | : Odourless. |
| Odour threshold | : No data available |
| pH | : No data available |
| pH solution | : No data available |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Relative evaporation rate (ether=1) | : No data available |
| Melting point | : Not applicable (decomposes) |
| Freezing point | : Not applicable |
| Boiling point | : Not applicable (decomposes) |
| Flash point | : Not applicable |
| Auto-ignition temperature | : Not applicable |
| Decomposition temperature | : > 460 °C |
| Flammability (solid, gas) | : Non flammable. |
| Vapour pressure | : < 0.0001 hPa (20 °C, Estimated value) |
| Vapour pressure at 50 °C | : No data available |
| Relative vapour density at 20 °C | : Not applicable |
| Relative density | : 2.8 (20 °C) |
| Relative density of saturated gas/air mixture | : No data available |
| Density | : 2805 kg/m ³ |
| Relative gas density | : No data available |

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| | |
|---|---|
| Solubility | : Reacts with water. Water: soluble |
| Partition coefficient n-octanol/water (Log Pow) | : No data available |
| Partition coefficient n-octanol/water (Log Kow) | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive properties | : Not explosive. |
| Oxidising properties | : May cause fire or explosion; strong oxidiser. |
| Explosive limits | : Not applicable |
| Lower explosive limit (LEL) | : No data available |
| Upper explosive limit (UEL) | : No data available |

9.2. Other information

| | |
|------------------|--------------------------------|
| VOC content | : Not applicable (inorganic) |
| Other properties | : Hygroscopic. Basic reaction. |

SECTION 10: Stability and reactivity

10.1. Reactivity

Absorbs the atmospheric CO₂. Reacts violently with many compounds e.g.: with organic material and with (strong) reducers with (increased) risk of fire/explosion. Reacts violently with combustible materials: risk of spontaneous ignition. Reacts exothermically with (some) acids and with alcohols: (increased) risk of fire/explosion. On heating: oxidation resulting in increased fire or explosion risk. May cause fire or explosion; strong oxidiser.

10.2. Chemical stability

Unstable on exposure to moisture. Unstable on exposure to air.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Combustible materials.

10.6. Hazardous decomposition products

Violent exothermic reaction with water (moisture): oxidation resulting in increased fire or explosion risk: release of corrosive products (sodium hydroxide).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|---|--|
| Acute toxicity (oral) | : Not classified |
| Acute toxicity (dermal) | : Not classified |
| Acute toxicity (inhalation) | : Not classified |
| Skin corrosion/irritation | : Causes severe skin burns. |
| Serious eye damage/irritation | : Assumed to cause serious eye damage |
| Respiratory or skin sensitisation | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : Not classified |
| STOT-repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |
| Potential adverse human health effects and symptoms | : Causes severe skin burns. Causes serious eye damage. |

SECTION 12: Ecological information

12.1. Toxicity

| | |
|-------------------|--|
| Ecology - general | : Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008. Before neutralisation, the product may represent a danger to aquatic organisms. |
| Ecology - air | : Not included in the list of substances which may contribute to the greenhouse effect (IPCC). Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014). Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009). |
| Ecology - water | : pH shift. Reaction products are harmful to aquatic organisms. |

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According to SANS 10234:2008 and SANS 11014:2010

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

12.2. Persistence and degradability

| SODIUM PEROXIDE (1313-60-6) | |
|-------------------------------|-----------------------------------|
| Persistence and degradability | Biodegradability: not applicable. |
| Chemical oxygen demand (COD) | Not applicable (inorganic) |
| ThOD | Not applicable (inorganic) |

12.3. Bioaccumulative potential

| SODIUM PEROXIDE (1313-60-6) | |
|-----------------------------|----------------------|
| Bioaccumulative potential | Not bioaccumulative. |

12.4. Mobility in soil

| SODIUM PEROXIDE (1313-60-6) | |
|-----------------------------|---|
| Mobility in soil | No additional information available |
| Ecology - soil | No (test)data on mobility of the substance available. |

12.5. Other adverse effects

Ozone : Not classified
Other adverse effects : No additional information available




SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Use appropriate containment to avoid environmental contamination. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. May be discharged to wastewater treatment installation.
Additional information : Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

SECTION 14: Transport information

In accordance with SANS / IMDG / IATA

| SANS | IMDG | IATA |
|--|---|---|
| 14.1. UN number | | |
| 1504 | 1504 | 1504 |
| 14.2. Proper Shipping Name | | |
| SODIUM PEROXIDE | SODIUM PEROXIDE | Sodium peroxide |
| 14.3. Transport hazard class(es) | | |
| 5.1 | 5.1 | 5.1 |
|  |  |  Not applicable |
| 14.4. Packing group | | |
| I | I | I |
| 14.5. Environmental hazards | | |
| Dangerous for the environment : No | Dangerous for the environment : No | Dangerous for the environment : No |
| No supplementary information available | | |

14.6. Special precautions for user

- SANS

Transport regulations (UN) : Subject to the provisions
Limited quantities (SANS) : 0
Limited quantities (SANS) : 0

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Packagings, large packagings and IBCs : P503, IBC05
Packing instructions (SANS)

Packagings, large packagings and IBCs Special : B1
packing instructions (SANS)

- IMDG

Transport regulations (IMDG) : Subject to the provisions
Limited quantities (IMDG) : 0
Excepted quantities (IMDG) : E0
Packing instructions (IMDG) : P503
IBC packing instructions (IMDG) : IBC05
IBC special provisions (IMDG) : B1
EmS-No. (Fire) : F-G - FIRE SCHEDULE Golf - WATER-REACTIVE SUBSTANCES
EmS-No. (Spillage) : S-Q - SPILLAGE SCHEDULE Quebec - OXIDIZING SUBSTANCES
Stowage category (IMDG) : C
Properties and observations (IMDG) : Pale yellow coarse powder or granules. Particularly if wetted with small quantities of water, a mixture with combustible material may ignite, following impact or friction. When involved in a fire, or in contact with water or acids, decomposes, evolving oxygen. Highly irritating to skin, eyes and mucous membranes.

- IATA

Transport regulations (IATA) : Subject to the provisions
PCA Excepted quantities (IATA) : E0
PCA Limited quantities (IATA) : Forbidden
PCA limited quantity max net quantity (IATA) : Forbidden
PCA packing instructions (IATA) : Forbidden
PCA max net quantity (IATA) : Forbidden
CAO packing instructions (IATA) : 561
CAO max net quantity (IATA) : 15kg
Special provisions (IATA) : A1
ERG code (IATA) : 5L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health, and environmental national regulations specific for the product

Regulatory reference : SANS 10234:2008; SANS 11014:2010; SANS 10228:2012; SANS 10229:2010; SANS 10232(1,2,4), SANS 10231:2018; Occupational Health and Safety Act 85 of 1993; National Road Traffic Act 93 of 1996.

SECTION 16: Other information

Issue date : 21/02/2020
Revision date : 21/02/2025

Full text of H-statements:

| | |
|------|---|
| H271 | May cause fire or explosion; strong oxidiser. |
| H314 | Causes severe skin burns and eye damage. |

SDS South Africa

The data provided in this Safety Data Sheet (SDS) is correct to the best of our knowledge. The data relates to the specific product as named and is intended as a guide to the safe handling of the product in all its facets. The data may no longer be valid if the product is used in any process or in combination with other products. This SDS is not a quality specification nor any form of guarantee.