

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.06.2017

Version number 7

1 Identification of the substance/mixture and of the company/undertaking

· **Product identifier**

· **Trade name:** HYDROGEN PEROXIDE 35%

· **Article number:** PA0027

· **CAS Number:** 7722-84-1/2

· **EC number:**

231-765-0

· **Index number:**

008-003-00-9

· **Relevant identified uses of the substance or mixture and uses advised against Industrial use**

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Johannesburg

1 Berrange Road

Wadeville, Germiston

Tel: 011-821 3300

Port Elizabeth

127 Grahamstown Road

Deal Party, Port Elizabeth

Tel: 041-403 1000

Cape Town

54 Killarney Avenue

Killarney Gardens, Milnerton, Cape Town

Tel: 021-550 8100

Jacobs

150 Quality Street,

Jacobs, Durban

Tel: 031-468 5424

Mobeni

90 Pendlebury Road,

Mobeni

Tel: 031-469 0165

Head Office

13 Sloane Street

Epsom Downs Office Park

Bryanston

Tel: 011-7098743

Protea Chemicals KZN

150 Quality Street, Jacobs

Durban

Tel: 031-4685424

Protea Chemicals Cape Town

54 Killarney Avenue

Killarney Gardens,

Milnerton, Cape Town

Tel: 021-5508100

Protea Chemicals Inland

1 Berrange Rd

Wadeville, Germiston

Tel: 011-8213300

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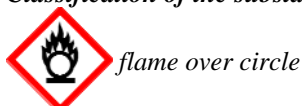
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- **Further information obtainable from:** Protea Chemicals
- **Emergency telephone number:**
08610 OMNIA or
08610 66642

2 Hazards identification

- **Classification of the substance or mixture**



Ox. Liq. 1 H271 May cause fire or explosion; strong oxidiser.



Skin Corr. 1A H314 Causes severe skin burns and eye damage.



Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H332 Harmful if inhaled.

- **Label elements**

- **GHS label elements**

The substance is classified and labelled according to the Globally Harmonised System (GHS).

- **Hazard pictograms**



GHS03 GHS05 GHS07

- **Signal word** *Danger*

- **Hazard statements**

May cause fire or explosion; strong oxidiser.

Harmful if swallowed or if inhaled.

Causes severe skin burns and eye damage.

- **Precautionary statements**

Take any precaution to avoid mixing with combustibles.

Wear fire/flame resistant/retardant clothing.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

Immediately call a POISON CENTER/doctor.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Other hazards**

- **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.



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3 Composition/information on ingredients

- **Chemical characterisation: Substances**
- **CAS No. Description**
HYDROGEN PEROXIDE 35%
- **Identification number(s)**
- **EC number: 231-765-0**
- **Index number: 008-003-00-9**

4 First aid measures

- **Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
Remove to fresh air. In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly. Remove contaminated clothing. Flush affected areas with plenty of water and soap.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Call for a doctor immediately. Do not induce vomiting. Rinse mouth with water (only if person is conscious).
Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Organic compounds
- **Special hazards arising from the substance or mixture**
Product is fire-stimulating. Involved in fire, it may decompose yielding oxygen. Release of oxygen may support combustion.
- **Advice for firefighters** Wear chemical protective suit.
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water. Should not be released into the environment.

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- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders). Transfer into suitable containers. To be disposed of in compliance with existing regulations. After cleaning, flush away traces with water.
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
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:**
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:** Protect from heat.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep container tightly sealed in a dry well-ventilated place.
Store in cool, dry conditions in well sealed receptacles.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:**
Ensure eyewash stations and safety showers are close to the workstation location.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Occupational Exposure Limits (OEL)**
- | | |
|----------------------|--------------------|
| TWA OEL-RL | SHORT TERM OEL-RL |
| 1.5mg/m ³ | 3mg/m ³ |
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**
Due to missing tests no recommendation to the glove material can be given for the product/the preparation/ the chemical mixture.



Protective gloves

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The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:	Liquid
Colour:	Clear colourless
Odour:	Pungent
Odour threshold:	Not determined.

- **pH-value (as is g/l) at 20 °C:** <3

- **Change in condition**

Melting point/freezing point:	-0,4 °C
Initial boiling point and boiling range:	150,2 °C

- **Flash point:** Not applicable.

- **Flammability (solid, gas):** Not applicable.

- **Ignition temperature:**

Decomposition temperature: Not determined.

- **Auto-ignition temperature:** Not determined.

- **Explosive properties:** Product does not present an explosion hazard.
Heating may cause an explosion.

- **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

- **Vapour pressure at 20 °C:** 1,9 hPa

- **Density at 20 °C:** 1,069-1,192 g/cm³

- **Relative density** Not determined.

- **Vapour density** Not determined.

- **Evaporation rate** Not determined.

- **Solubility in / Miscibility with water:** Fully miscible.

- **Partition coefficient: n-octanol/water:** Not determined.

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- **Viscosity:**
 - Dynamic:** Not determined.
 - Kinematic:** Not determined.
- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** Sun rays, heat, heat effect
- **Incompatible materials:** Reducing agents, metallic salts, alkalis, hydrochloric acid.
- **Hazardous decomposition products:** Steam, oxygen under conditions of thermal decomposition.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**

- **LD/LC50 values relevant for classification:**

Oral	LD50	1193 mg/kg (rat)
Dermal	LD50	>6500 mg/kg (rabbit)
Inhalative	LC50/4 h	1,5 mg/l (ATE)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Strong caustic effect on skin and mucous membranes.
- **Serious eye damage/irritation** Strong caustic effect.
- **Respiratory or skin sensitisation** No sensitising effects known.
- **Additional toxicological information:**
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

EC50	466 mg/kg (Algae) (OECD TG 209)
	7,7/24h mg/kg (daphnia)
	Hydrogen peroxide 100%
LC50 96 hours	37,4 mg/L (Fish)
	Hydrogen peroxide 100%

- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralised.

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- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

· UN-Number	UN2014
· ADR, IMDG, IATA	
· UN proper shipping name	2014 HYDROGEN PEROXIDE, AQUEOUS SOLUTION
· ADR	2014 HYDROGEN PEROXIDE, AQUEOUS SOLUTION
· IMDG, IATA	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
· Transport hazard class(es)	
· ADR	
	
· Class	5.1 Oxidising substances.
· Label	5.1+8
· IMDG	
	
· Class	5.1 Oxidising substances.
· Label	5.1/8
· IATA	
	
· Class	5.1 Oxidising substances.
· Label	5.1 (8)
· Subsidiary risk	8
· Packing group	II
· ADR, IMDG, IATA	II

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· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Oxidising substances.
· Danger code (Kemler):	559
· EMS Number:	F-H,S-Q
· Segregation groups	Peroxides
· Stowage Category	D
· Stowage Code	SW1 Protected from sources of heat.
· Segregation Code	SG16 Stow "separated from" class 4.1 SG59 Stow "separated from" permanganates SG72 See 7.2.6.3.2.
· ERG No.	140
· Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· Transport category	2
· Tunnel restriction code	E
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 2014 HYDROGEN PEROXIDE, AQUEOUS SOLUTION, 5.1 (8), II

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- **GHS label elements**
The substance is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



GHS03 GHS05 GHS07

- **Signal word** Danger
- **Hazard statements**
May cause fire or explosion; strong oxidiser.
Harmful if swallowed or if inhaled.
Causes severe skin burns and eye damage.
- **Precautionary statements**
Take any precaution to avoid mixing with combustibles.
Wear fire/flame resistant/retardant clothing.

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*IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.**IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**Immediately call a POISON CENTER/doctor.**Store locked up.**Dispose of contents/container in accordance with local/regional/national/international regulations.*

- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **Seveso category P8 OXIDISING LIQUIDS AND SOLIDS**
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Ox. Liq. 1: Oxidizing liquids – Category 1

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1A: Skin corrosion/irritation – Category 1A