



**1. Identification of the substance/mixture and of the Company/undertaking:**

1.1 Product identifier:

Product Name: Pola Professional 35%

1.2 Relevant identified use:

Relevant use: Professional Dental use: To medically bleach endodontically treated teeth, to be performed by a dentist.

1.3 Details of the supplier of the Safety Data Sheet:

**Manufacturer / Supplier**

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**2. Hazard Identification**

Classification of the substance/mixture:

**Pola Professional Liquid:**

Hazard Classification according to GHS:

**Signal word: DANGER**





## 2. Hazard Identification...continued

### **Pola Professional 35% Liquid (cont'd):**

GHS Classification:

Eye Damage (Category 1)

Skin Irritant (Category 2)

STOT (Single exposure) (Category 3)

Hazard phrase(s):

H315 Causes skin irritation

H318 Causes serious eye damage

H335 May cause respiratory irritation.

Precautionary phrase(s):

Prevention:

P264 Wash hands thoroughly after handling.

P261 Avoid breathing fume/vapour/mist.

P271 Use outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection /face protection.

P101 If medical advice is needed, have product container and instructions for use at hand.

P102 Keep out of reach of children.

P103 Read label instructions for use before use.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water

P321 Specific treatment, refer to Instructions for Use and First Aid Section of this Safety Data Sheet.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P362 Take off contaminated clothing and wash before reuse.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 Call a POISON CENTRE or doctor/physician if you feel unwell.

Storage: P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.

Disposal: P501 Dispose of contents in accordance with local official regulations.

Other: **Pola Professional 35% Liquid** is corrosive and causes irritation/damage to skin, eye and respiratory tract/mucous membrane.



## 2. Hazard Identification...continued

### Pola Professional Powder:

**SIGNAL WORD: WARNING**



GHS Classification:

Skin irritant 2

Eye Irritant 2

STOT SE (respiratory tract) 3

Hazard statements:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statements:

Prevention:

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P271 Use in a well-ventilated area

Response:

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Disposal:

P501 Disposal of container/container in accordance local regulation.

Other: **Pola Professional Powder** is hazardous. It is fluffy and easily airborne. Limit disturbance of the powder pot and avoid inhalation of any airborne dust.

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## 3. Composition / Information on ingredients

### **Pola Professional 35% Liquid:**

<u>Composition:</u>	<u>CAS No.</u>	<u>Wt. % w/w</u>	<u>EC No.</u>	<u>Index No.</u>
Hydrogen peroxide	7722-84-1	35.0	231-765-0	008-003-00-9

Hazard classification and specific concentration limits, M-factors:



HYDROGEN PEROXIDE: Skin Irrit 2; H315: 35% ≤ C < 50%; Eye Dam. 1; H318 8% ≤ C < 50%; STOT SE 3; H335: C ≥ 35%.

### 3. Composition / Information on ingredients...continued

#### **Pola Professional Powder:**

<u>Composition:</u>	<u>CAS No.</u>	<u>Wt. % w/w</u>	<u>EC No.</u>	<u>Index No.</u>
Silicone dioxide powder	-	70.0-75.0	-	-

#### Hazard classification:

SILICON DIOXIDE: Skin irritant 2; Eye Irritant 2; STOT SE (respiratory tract) 3. H315; H319; H335.

### 4. First Aid Measures

Eye (contact): Immediately flush open eyes with running water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek urgent medical attention. Make sure the patient's, dentist's and auxiliary's eyes are protected.

Skin (contact): Remove contaminated clothing. If skin or hair contact occurs, wash skin and hair with running water. Skin may appear temporarily bleached white. Seek medical attention.

Ingestion: Rinse mouth. Do NOT induce vomiting, immediately drink lots of water/milk. Seek urgent medical attention.

Inhalation: Remove victim from exposure to fresh air. If rapid recovery does not occur or if feeling unwell, seek urgent medical attention.

Most important effects, acute and delayed:

The most important known symptoms and effects are described in section 2 and/or in section 11.

Indication of any immediate medical attention and special treatment needed: No data available

### 5. Fire Fighting Measures

Suitable extinguishing media: Water spray and carbon dioxide.

Unusual Fire and Explosion Hazards: Contact with other substances may cause fire. Container explosion may occur under fire conditions.

Unsuitable extinguishing media: Do not use extinguishing media for organic compounds.

Specific hazards arising from the mixture: The product itself does not burn. In the event of fire, product may decompose and release oxygen. Powder decomposes to sulfur oxides, oxygen, carbon monoxide, carbon dioxide.

Incompatible materials: Avoid contact with metals, metallic salts, alkalis, flammable substances, and organic solvents

Special protective equipment: Wear approved self-contained breathing apparatus, full protective clothing long with protective equipment.

Flammability: None expected. Non flammable (product does not burn),



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however will release oxygen when exposed to high heat.

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## 6. Accidental Release Measures

- Personal precautions: Do not get into eyes, on skin or clothing.  
Use personal protective equipment.  
Avoid breathing vapours, mist or gas.  
Wash thoroughly after handling.  
For personal protection see section 8.
- Environmental precautions: Prevent any spillage from entering waterways, drains or sewage system. Use protective eyewear, respiratory protection and latex gloves when handling.
- Methods for cleaning up and containment: Clean up with damp rag. Rinse rag thoroughly with water.  
Dispose of as hazardous waste. Wear full protective clothing.
- Removal of ignition sources: Eliminate all sources of ignition.
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## 7. Handling and storage

- Precautions for safe handling: Extreme care required when handling the Hydrogen Peroxide Liquid. Container may be under pressure. Remove cap with caution. Replace caps immediately after use. Care when handling the Pola Professional Powder to avoid disturbance, as the powder is easily airborne - avoid inhalation and contact with eyes.
- Conditions for safe storage, including any biocompatibilities: Storage by the end user (Dental Clinic) is recommended to be at temperatures between 2° - 8°C (35° - 45°F) and should be kept away from direct sunlight.
- Distribution: During distribution, to our customers, this product can be transported in non-refrigerated conditions between 15° to 25° C. This product can also withstand temperatures up to 40° C for short periods (2 to 3 days) and intermittent peaks up to 50°C.
- Specific end use: Apart from the use mentioned in section 1.2, there are no other uses for the product.
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## 8. Exposure controls / personal protection

Control parameters:  
Occupational exposure limits (NOHSC, NIOSH, OSHA,):

Standard name	Cas No	TWA (ppm)	TWA	STEL (ppm)	STEL (mg/m <sup>3</sup> )
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			(mg/m <sup>3</sup> )		
Hydrogen peroxide	7722-84-1	1	1.4	-	-

**8. Exposure controls / personal protection.....continued**

NOHSC – National Occupation Health and Safety Commission

NIOSH – National Institute for Occupation Safety and Health

OHSA – Occupational Health and Safety Authority

TWA – Time weighted average

STEL – Short term exposure limit

Appropriate engineering controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at end of workday.

Personal protective equipment:

Respiratory protection: Not required under normal conditions of use.  
Avoid breathing dust.

Hand protection: Chemical resistant gloves.

Eye protection: Safety glasses, goggles or face shield.

General safety and hygiene measures: Safety shower and eye bath. Wash thoroughly after handling. Wash contaminated clothing before re-use. Follow good housekeeping practices and good industrial hygiene in handling this material.

**9. Physical and chemical properties**

	<b>Pola Professional 35% Liquid</b>	<b>Pola</b>	<b>Professional</b>
<b>Powder</b>			
Appearance:	Clear, colourless liquid	Fluffy white speckled powder.	
Odour:	Not applicable	Not applicable	
Boiling point:	126°C	Not applicable	
Melting point:	-40°C	Not established	
Specific gravity:	1.13	Not established	
Flash point:	Not applicable	Not applicable	
Flammable:	Not flammable	Not flammable	
Autoflammability:	Does not self ignite	Does not self ignite	
Explosive properties:	Does not present an explosion hazard	Does not present an explosion hazard	
Oxidising properties:	Strong oxidiser	Strong oxidiser	
Vapour pressure (@ 30°C):	23.3 mm Hg	Not volatile	
Solubility:	Soluble in water	Not soluble in water	
Relative density:	1.13g/mL @ 25°C	Not established	
Auto-ignition temperature:	Not established	Not established	



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Decomposition temperature:	Not established	Not established
pH:	Not established	Not established

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## 10. Stability and Reactivity

Reactivity: Product is stable under directed instructions for use and storage.

Chemical Stability: Hydrogen Peroxide Liquid is easily decomposed. Powder is stable. Stable under normal conditions of use and storage, as indicated on label/instructions for use.

Conditions to avoid: Heat, moisture direct sunlight.

Materials to avoid: Metals, strong bases and acids, organic solvents, combustibles.

Hazardous decomposition products: Hydrogen Peroxide Liquid decomposes to oxygen and water. Powder decomposes to sulfur oxides, oxygen, carbon monoxide, carbon dioxide.

Hazardous reactivity (polymerization): Will not occur under normal conditions of use and storage.

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## 11. Toxicological information

Toxicological data on ingredients:

- Oral LD50 Rat: 805mg/Kg (OECD Test Guideline 401)
- Oral LD50 Rat: 1193mg/Kg (Literature) Hydrogen Peroxide 35% as test substance.
- Oral LD50 Rat: 801mg/Kg (Literature) Hydrogen Peroxide 60% as test substance.
- Inhale LC50 Rat: >0.17mg/L (Literature) Hydrogen Peroxide 50% as test substance.
- Skin LD50 Rabbit: >6500mg/Kg (Literature)
- Skin Irritation Rabbit: Strong corrosive (Literature)
- Eye Irritation Rabbit: Corrosive (Literature)
- Repeated Dose Toxicity: Mouse 90d changes of parameters of the blood, body weight development negative, irritive effect on gastro-intestinal tract (OECD).
- Genotoxicity in Vitro: Microorganisms, cell cultures - no mutagenic effects.
- Genotoxicity in Vivo: Micronucleus test mouse intraperitoneal - negative.

Carcinogenicity: Hydrogen Peroxide is not a carcinogenic substance according to MAK, IARC, NTP, OSHA and ACGIH.

Health affects – Acute:

Acute toxicity: Harmful by inhalation and ingestion.

Skin corrosion/irritation: Irritating to skin. With increasing contact length, local erythema or extreme irritation can occur.

Serious eye damage/irritation: Damaging to eyes. Extreme irritation up to cauterisation. Can cause severe conjunctivitis, cornea damage or



irreversible eye damage. Symptoms may occur without delay.

## 11. Toxicological information...continued

Ingestion:	Harmful if swallowed and can lead to irritation and bleeding of the mucosa. Rapid release of oxygen can cause distention  and bleeding of irritation/bleeding of the mucosa. Excessive ingestion can cause damage to internal organs.
Respiratory or skin sensitisation:	Inhalation of vapour and dust/powder can lead to irritation of the respiratory tract.
Germ cell mutagenicity:	No data available.
Carcinogenicity (according to IARC, MAK, NTP, OSHA, and ACGIH):	Hydrogen peroxide – Group 3 – not classifiable as to its carcinogenicity to humans.
Reproductive toxicity:	No data available.
Specific target organ toxicity – single exposure:	May cause irritation/damage to eyes, skin and respiratory system. Harmful if swallowed.
Specific target organ toxicity – repeated exposure:	No data available.
Aspiration hazard:	No data available.

## 12. Ecological information

Self assessment:	<b>Pola Professional 35% Liquid</b> - Biodegradable. <b>Pola Professional Powder</b> - Data not yet available.
Ecotoxicity:	No data available.
Persistence and biodegradability:	No data available.
Bioaccumulative potential:	No data available for Pola Professional powder. For Pola Professional 35% liquid: None. Hydrogen peroxide quickly decomposes to oxygen and water.
Mobility in soil:	No data available.
Results of PBT and VPvB assessment:	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
Other adverse effects (such as hazardous to ozone layer):	No data available.

## 13. Disposal considerations

Dispose of in accordance with local official regulations. Wash containers out with water prior to disposal.

Contaminated packaging:  
Dispose of contaminated packaging as hazardous waste in accordance with local official regulations





#### 14. Transport information

Hydrogen peroxide, aqueous solution UN2014 Packing Group II Class 5.1 subsidiary-risk Class 8.

If packed in Chemical kits the following classification may be considered if all ICAO/IATA transport requirements are met:

Chemical Kit UN3316 - Class 9.

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#### 15. Regulatory information

Classified according to the Australian SUSMP - *Standard for the Uniform Scheduling of Medicines and Poisons*, as follows: Schedule 6 – POISON

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#### 16. Other information

For professional use only. Use as directed.

The information provided herein is given in good faith, but no warranty expressed or implied is made.

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