

Date of Issue: **October, 2005**

## Material Safety Data Sheet

Hazardous according to criteria of NOHSC

Product Code: **1.07209**

**Hydrogen peroxide 30% H<sub>2</sub>O<sub>2</sub> (Perhydrol) GR for analysis ISO**

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### Identification

Product Name: Hydrogen peroxide 30% H<sub>2</sub>O<sub>2</sub> (Perhydrol) GR for analysis ISO

Other Names: HYDROGEN PEROXIDE, AQUEOUS SOLUTIONS

Solution in water

Product Code: 1.07209

UN Number: 2014

Dangerous Goods Class & Subsidiary Risk: 5.1 + 8

Packaging Group: II

Hazchem Code: 2P

Poisons Schedule Number: S6

Use: General laboratory reagent.

### Physical Description and Properties

Colour: colourless

Form: liquid

Odour: odourless

Boiling Point: 107 °C

Melting Point: -26 °C

Vapour Pressure: (20 °C) ~ 18 hPa

Vapour Density: No data

Flash Point (Open Cup): No data.

Upper Flammability Limit: No data

Lower Flammability Limit: No data

Ignition Temperature: Not applicable

Log P (o/w): No data

Specific Gravity or Density: 1.10

Viscosity: Not Applicable

Solubility in Water: Miscible (Soluble) in all proportions

pH: 2-4

Other Information: Non-combustible. Has a fire-promoting effect due to release of oxygen.

light-sensitive; heat-sensitive.

May contain stabiliser: pyridine-2,6-dicarboxylic acid (dipicolinic acid)

Conditions / Substances to be avoided: Conditions to be avoided: Heat.

Substances to be avoided: Alkali metals, alkali salts, alkali hydroxides, alkaline earth metals, metals, metals in powder form, metallic oxides, metallic salts, nonmetals, nonmetallic oxides, aldehydes, alcohols, amines, ammonia, carbon, hydrazine and derivatives, hydrides, combustible substances, ethers, acids, anhydrides, oxidizing agents, organic substances, peroxide compounds, impurities/dust, KMnO<sub>4</sub>, organic solvents, organic nitro compounds, brass.

**Ingredients**

<b>Chemical Name</b>	<b>CAS Number</b>	<b>Proportion</b>
Hydrogen peroxide	7722-84-1	30 %
Water	7732-18-5	to 100 %

All constituent chemicals are listed in the Australian Inventory of Chemical Substances (AICS)

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### **Health Hazard Information**

Toxicological Information: LD50 (oral, rat): 1000 mg/kg.

Carcinogen Category: Has been found to cause cancer in laboratory animals.

Mutagen Category: Evidence of mutagenic effects.

Teratogen Category: No evidence of teratogenic effects.

After inhalation of vapour: Mucosal irritation. Possible effects: Damage of respiratory tract.

After skin contact: After long-term exposure to the chemical: Burns.

After eye contact: Burns. Risk of blindness!

After swallowing: Burns in mouth, throat, oesophagus and gastrointestinal tract.

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**First Aid Information**

For advice, contact a doctor or Poisons Information Centre at once. Phone 13 1126. Urgent hospital treatment is likely to be needed.

Eye contact: Hold eyes open, flood with water for at least 15 minutes and see a doctor.

Inhalation: Remove from exposure, rest and keep warm. In severe cases, or if exposure has been great, OBTAIN MEDICAL ATTENTION.

Skin contact: Drench the skin thoroughly with water. Remove contaminated clothing and wash before re-use. Unless contact has been slight, OBTAIN MEDICAL ATTENTION.

Ingestion: Wash out mouth thoroughly with water and give plenty of water to drink, (if necessary several litres), avoid vomiting (risk of perforation!). Do not attempt to neutralize. OBTAIN MEDICAL ATTENTION. Contact a doctor or Poisons Information Centre. Phone 13 1126.

First Aid Facilities: Safety shower. Eyewash facilities.

**Advice to Doctor:** Treat symptomatically.

**Precautions For Use:****NOHSC Australia Exposure Standards:**

	TWA	STEL
Hydrogen peroxide	1 ppm	N/A
	1.4 mg/m <sup>3</sup>	N/A

Peak Limit: N/A

Carcinogen Limit: N/A

**Protective Measures:**

Engineering Controls & Personal Protection: As appropriate to quantity handled.

Respirator: required when vapours/aerosols are generated. Ensure respirator is clean, well-fitting and in good working order. All respirators should comply with Australian Standard AS 1716 and be used in accordance with AS 1715.  
 Ventilation: Fume cupboard, flameproof  
 Gloves: Nitrile  
 Eye Protection: Goggles or face-shield

Other Precautions: Plastic apron, sleeves, boots - if handling large quantities

Engineering methods to control or prevent exposure are preferred. Methods could include process enclosure or mechanical ventilation.

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### **Safe Handling Information:**

**Storage:** Store in a cool place (below 15°C). Keep well closed and protected from direct sunlight and moisture. Store in vented containers to permit release of internal pressure. Store away from combustible materials. Small containers must be emptied within 2 years.

**Handling:** Do not use metal equipment or containers. Do not mutilate or expose container to heat, even when empty. Avoid contact with skin and eyes. Immediately change contaminated clothing.

### **Transport:**

UN Number: 2014

Dangerous Goods Class & Subsidiary Risk: 5.1 + 8

Packaging Group: II

Other Names: HYDROGEN PEROXIDE, AQUEOUS SOLUTIONS

### **Spillage and Disposal:**

Wear appropriate protective clothing. If local regulations permit, mop up with plenty of water and run to waste, diluting greatly with running water. Otherwise absorb on an inert absorbent, transfer to container and arrange removal by disposal company. Ventilate area to dispel residual vapour. For large spillages liquids should be contained with sand or earth and both liquids and solids transferred to salvage containers. Any residues should be treated as for small spillages.

Chemical residues are generally classified as special waste, and as such are covered by regulations which vary according to location. Contact your local waste disposal authority for advice, or pass to a chemical disposal company. Rinse out empty containers thoroughly before returning for recycling.

### **Fire and Explosion:**

**Flammability:** Non-combustible. Has a fire-promoting effect due to release of oxygen.

**Suitable Extinguishing Media:** To suit environment. Cool containers with water.

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### **Other Information:**

Hazard Symbol: Xn

Risk Codes: R22-41

Harmful if swallowed. Risk of serious damage to eyes.

Safety Codes: S26-39

In case of contact with eyes, rinse immediately with plenty of water and contact a doctor or Poisons Information Centre. Phone 13 11 26. Wear eye/face protection.

Ecological Information: Biologic degradation: Readily biodegradable. Decomposition products: water and oxygen.

Ecotoxic effects: Biological effects: Toxic for aquatic organisms.

In high concentrations: Toxic effect on fish and plankton.

When used properly, no impairments in the function of waste- water- treatment plants are to be expected.

Fish toxicity: C.carpio LC50: 42 mg/l /48 h;

Algal toxicity: Chlorella vulgaris IC50: 2.5 mg/l /72 h;

Daphnia toxicity: Daphnia magna EC50: 7.7 mg/l /24 h;

Further ecologic data:

No ecological problems are to be expected when the product is handled and used with due care and attention.

*Key to Hazard Symbols: Xn=Harmful, Xi=Irritant, T=Toxic, T+=Very Toxic, C=Corrosive, F=Flammable, F+=Very Flammable, E=Explosive, N=Dangerous for the Environment, H=NOHSC undefined hazardous substance*

### **Contact Point:**

Operations Manager

(03) 9728 5855

Monday through Friday, 8:00am to 5:00pm (EST)

### **Manufacturer's Advice:**

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other product. If clarification of further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request