

Material Safety Data Sheet



This material is hazardous according to criteria of NOHSC.
Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail.

1. Identification of the substance/preparation and of the company/undertaking

Product Name: HYDROGEN PEROXIDE (20% - 60%)

Synonyms: Peroxide (20% - 60%); Hydroperoxide (20% - 60%); 20-60% Hydrogen peroxide.

Supplier: Orica Australia Pty Ltd

ABN: 004 117 828

Street Address: 1 Nicholson Street,
Melbourne 3000
Australia

Telephone Number: +61 3 9665 7111

Facsimile: +61 3 9665 7937

Emergency Telephone: 1 800 033 111 (ALL HOURS)

2. Composition/information on ingredients

Product Description: Uses: Bleaching and deodourising of textiles, bleaching wood pulp, and hair; plasticisers; rocket fuel; foam rubber; dyeing; electroplating; antiseptic.

Components / CAS Number	Proportion	Risk Phrases
Hydrogen peroxide 7722-84-1	20-60%	R8, R22, R34, R41
Water 7732-18-5	40-80%	Non hazardous

3. Hazards identification

Risk Phrases: Contact with combustible material may cause fire. Harmful if swallowed. Causes burns. Risk of serious damage to eyes.

Poisons Schedule: S6 Poison.

4. First-aid measures

For advice, contact a Poisons Information Centre (Phone eg. Australia 131 126; New Zealand 0 800 764766) or a doctor at once. Urgent hospital treatment is likely to be needed.

Inhalation: Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. For all but the most minor symptoms arrange for patient to be

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Skin Contact: seen by a doctor as soon as possible, either on site or at the nearest hospital. If spilt on large areas of skin or hair, immediately drench with running water and remove clothing. Continue to wash skin and hair with plenty of water (and soap if material is insoluble) until advised to stop by the Poisons Information Centre or a doctor.

Eye Contact: If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

Ingestion: Immediately rinse mouth with water. If swallowed, do NOT induce vomiting. Immediately give a glass of water. Seek immediate medical assistance.

Notes to physician: Treat symptomatically. Can cause corneal burns.

5. Fire-fighting measures

Specific Hazards: Oxidizing substance. Non combustible, but will support combustion of other materials.

Fire-fighting advice: Heating can cause expansion or decomposition of the material, which can lead to the containers exploding. If safe to do so, remove containers from the path of fire. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

Suitable Extinguishing Media: Not combustible, however, if material is involved in a fire use: Water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).

6. Accidental release measures

Clear area of all unprotected personnel. If enough water is available dilute to <3%, flood area with water and drain to an approved chemical sewer or wastewater treatment system, including municipal sewers if approved. If only limited water is available (not enough to dilute spill to 3% concentration), use water for potential fire fighting of combustible materials. Contain spill until decomposition is completed naturally. If contamination of sewers or waterways has occurred advise local emergency services.

7. Handling and storage

Handling advice: Avoid skin and eye contact and breathing in vapour, mists and aerosols. Keep out of reach of children. Do not return unused product to original container.

Storage advice: Store in cool place and out of direct sunlight. Store away from incompatible materials described in Section 10. Store away from foodstuffs. Keep containers closed when not in use - check regularly for leaks.

This material is a Scheduled Poison S6 and must be stored, maintained and used in accordance with the relevant regulations.

8. Exposure controls/personal protection

Occupational Exposure Limits:

No value assigned for this specific material by the National Occupational Health and Safety Commission. However, Exposure Standard(s) for constituent(s):

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Hydrogen peroxide: 8hr TWA = 1.4 mg/m³ (1 ppm)

As published by the National Occupational Health and Safety Commission.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Engineering Control Measures:

Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Exposure Standards. If inhalation risk exists: Use with local exhaust ventilation or while wearing suitable mist respirator. Keep containers closed when not in use.

Personal Protective Equipment:

Orica Personal Protection Guide No. 1, 1998: D - OVERALLS, RUBBER BOOTS, FACE SHIELD, SAFETY SHOES, GLOVES (Long), APRON.

Wear overalls, face shield, elbow-length impervious gloves, splash apron and rubber boots. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

If risk of inhalation exists, wear suitable mist respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

9. Physical and chemical properties

Physical state:	Clear Liquid
Colour:	Colourless
Odour:	Sharp
Solubility:	Miscible with water.
Specific Gravity:	1.07-1.24 @20°C
Relative Vapour Density (air=1):	Not available
Vapour Pressure (20 °C):	14-29 Torr @30°C
Flash Point (°C):	Not applicable
Flammability Limits (%):	Not applicable
Autoignition Temperature (°C):	Not applicable
Boiling Point/Range (°C):	104-119
pH:	1-4
Evaporation Rate:	>1 (Butyl acetate = 1)

Freezing Point/Range (°C): -14 to -56

10. Stability and reactivity

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Stability: Powerful oxidising agent. Incompatible with acids , reducing agents , alkalis , heavy metals and their salts , dust , enzymes , combustible material , organic chemicals , cyanides , dirt , rust and hexavalent chromium compounds .

11. Toxicological information

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion: Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract. Decomposition may occur in the stomach leading to the production of oxygen gas. This may cause distension of the stomach and the possibility of some bleeding. Death may occur if large amounts are ingested.

Eye contact: A severe eye irritant. Corrosive to eyes; contact can cause corneal burns. Contamination of eyes can result in permanent injury.

Skin contact: Contact with skin will result in severe irritation. Corrosive to skin - may cause skin burns.

Inhalation: Breathing in mists or aerosols may produce respiratory irritation.

Long Term Effects:

Available evidence from animal studies indicate that repeated or prolonged exposure to this material could result in effects on the lungs.

Toxicological Data:

Oral LD50 (rat): 910 mg/kg.

12. Ecotoxicological information

Avoid contaminating waterways.

13. Disposal considerations

Refer to Waste Management Authority. Dispose of material through a licensed waste contractor. Do not pump contaminated peroxide into road tanker for disposal. When diluted, will naturally decompose to water and oxygen. Decontamination and destruction of containers should be considered.

14. Transport information

Road and Rail Transport

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UN No: 2014
Class-primary 5.1 Oxidizing Agent

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Subrisk 1: 8 Corrosive
Packing Group: II
Proper Shipping Name: HYDROGEN PEROXIDE, AQUEOUS SOLUTION

Hazchem Code: 2P

Marine Transport

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

UN No: 2014
Class-primary: 5.1 Oxidizing Agent
Subrisk 1: 8 Corrosive
Packing Group: II
Proper Shipping Name: HYDROGEN PEROXIDE, AQUEOUS SOLUTION

Air Transport

TRANSPORT PROHIBITED under the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air in passenger aircraft and cargo aircraft.

15. Regulatory information

Classification: This material is hazardous according to criteria of NOHSC.
Xn: Harmful
C: Corrosive

Risk Phrase(s): R8: Contact with combustible material may cause fire.
R22: Harmful if swallowed.
R34: Causes burns.
R41: Risk of serious damage to eyes.

Safety Phrase(s): S1/2: Keep locked up and out of the reach of children.
S3: Keep in a cool place.
S24/25: Avoid contact with skin and eyes.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible).

Poisons Schedule: S6 Poison.

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

16. Other information

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'Registry of Toxic Effects of Chemical Substances'. Ed. D. Sweet, US Dept. of Health & Human Services: Cincinnati, 2004.

This material safety data sheet has been prepared by SH&E Shared Services, Orica.

Reason(s) for Issue:

Revised Primary MSDS

Alignment to HSNO requirements

This MSDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Orica Limited cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Orica representative or Orica Limited at the contact details on page 1.

Orica Limited's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

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