

Safety Data Sheet



1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **HYDROGEN PEROXIDE 50% (TECHNICAL OR FOOD GRADE)**

Other name(s): Hyprox 50HP

Recommended Use of the Chemical and Restrictions on Use Bleaching and deodourising of textiles, bleaching wood pulp, and hair; plasticisers; rocket fuel; foam rubber; dyeing; electroplating; antiseptic. Dairy industry: Sanitising and deodourising properties, bacteria control. Water treatment: Sanitisation. Effluent and waste water treatment: Reduce sulphide corrosion, deodourising, supplemental dissolved oxygen.

Supplier: Ixom Operations Pty Ltd (Incorporated in Australia)
NZBN: 9429041465226
Street Address: 166 Totara Street
Mt Maunganui South
New Zealand

Telephone Number: +64 9 368 2700
Facsimile: +64 9 368 2710
Emergency Telephone: **0 800 734 607 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

Classified as a Dangerous Good according to NZS 5433:2012 Transport of Dangerous Goods on Land.

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017 and the Hazardous Substances (Classification) Notice 2017.

SIGNAL WORD: DANGER

Subclasses:

Subclass 5.1.1 Category B (Oxidising Substances that are solids or liquids: medium hazard) - Oxidising Substances.

Subclass 6.1 Category D - Substances which are acutely toxic.

Subclass 6.9 Category B - Substances that are harmful to human target organs or systems.

Subclass 8.2 Category B - Substances that are corrosive to dermal tissue.

Subclass 8.3 Category A - Substances that are corrosive to ocular tissue.

Subclass 9.1 Category D - Substances that are slightly harmful to the aquatic environment or are otherwise designed for biocidal action.

Subclass 9.3 Category C - Substances that are harmful to terrestrial vertebrates.

Oxidising [5.1.1], Corrosive Substances Group Standard 2017

Approval Number: HSR002632



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Hazard Statement(s):

H272 May intensify fire; oxidizer.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H433 Harmful to terrestrial vertebrates.

Precautionary Statement(s):

Prevention:

P102 Keep out of reach of children.
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P220 Keep and store away from clothing, incompatible materials, combustible materials.
P221 Take any precaution to avoid mixing with combustibles/incompatible materials.
P260 Do not breathe mist/vapours/spray.
P270 Do not eat, drink or smoke when using this product.
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P273 Avoid release to the environment.

Response:

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P363 Wash contaminated clothing before re-use.
P321 Specific treatment (see First Aid Measures on the Safety Data Sheet).
P304+P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P314 Get medical advice/attention if you feel unwell.
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.
P370+P378 In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet for extinction.

Storage:

P405 Store locked up.

Disposal:

P501 In case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Notice 2017. This may also include any method of disposal that must be avoided.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
Hydrogen peroxide	7722-84-1	50%	H271 H332 H302 H314
Water	7732-18-5	50%	-

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) 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 seen by a doctor as soon as possible, either on site or at the nearest hospital.

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Substance No: 000034430401

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**Skin Contact:**

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:

Immediately wash in and around the eye area with large amounts of water for at least 15 minutes. Eyelids to be held apart. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport promptly to hospital or medical centre.

Ingestion:

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

Indication of immediate medical attention and special treatment needed:

Treat symptomatically. Can cause corneal burns.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Not combustible, however, if material is involved in a fire use: Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

Unsuitable Extinguishing Media:

None known.

Hazchem or Emergency Action Code: 2P**Specific hazards arising from the chemical:**

Oxidizing substance. Non combustible, but will support combustion of other materials. Contact with combustible material may cause fire. Explosion risk in case of fire, especially if contaminated or confined.

Special protective equipment and precautions for fire-fighters:

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. Keep containers cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures/Environmental precautions:

Clear area of all unprotected personnel. If contamination of sewers or waterways has occurred advise local emergency services.

Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:

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. DO NOT return spilled material to original container for re-use.

7. HANDLING AND STORAGE

Precautions for safe handling: 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. When using do not eat, drink or smoke. Eye wash facilities and emergency shower must be available when handling this product.

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Conditions for safe storage, including any incompatibilities: Store in a cool, dry, well ventilated place. Store in the original container, tightly closed and away from foodstuffs. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace Exposure Standards: No value assigned for this specific material by the New Zealand Workplace Health & Safety Authority. However, Workplace Exposure Standard(s) for constituent(s):

Hydrogen peroxide: WES-TWA 1 ppm, 1.4 mg/m³, 6.7B Suspected human carcinogen

As published by the New Zealand Workplace Health & Safety Authority.

WES - TWA (Workplace Exposure Standard - Time Weighted Average) - The eight-hour, time-weighted average exposure standard is designed to protect the worker from the effects of long-term exposure.

Carcinogen Category 6.7B - Suspected human carcinogen.

These Workplace 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 workplace 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.

Appropriate engineering controls:

Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Workplace Exposure Standards. Keep containers closed when not in use.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Individual protection measures, such as Personal Protective Equipment (PPE):

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, CHEMICAL GOGGLES, FACE SHIELD, GLOVES (Long), APRON, RUBBER BOOTS.



Wear overalls, chemical goggles, face shield, elbow-length impervious gloves, splash apron or equivalent chemical impervious outer garment, 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 determined by a risk assessment an inhalation risk exists, wear a 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:	Slightly Pungent , Irritating
Solubility:	Miscible with water.
Specific Gravity:	1.1-1.2
Relative Vapour Density (air=1):	1
Vapour Pressure (20 °C):	<1 hPa
Flash Point (°C):	Not applicable
Flammability Limits (%):	Not applicable
Autoignition Temperature (°C):	Not applicable
Boiling Point/Range (°C):	114
Decomposition Point (°C):	>=60 (Self-accelerating decomposition temperature)
pH:	2.0 @21°C
Viscosity:	1.17 mPa.s @20°C
Surface Tension:	75.6 mN/m @20°C
Freezing Point/Range (°C):	-52

10. STABILITY AND REACTIVITY

Reactivity:	Contact with combustible material may cause fire.
Chemical stability:	Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Possibility of hazardous reactions:	Contact with combustible material may cause fire. Risk of explosion if heated under confinement. May rupture closed containers.
Conditions to avoid:	Avoid exposure to heat.
Incompatible materials:	Incompatible with acids , reducing agents , permanganates, bases , metals, heavy metals and their salts , dust , enzymes , combustible material , organic chemicals , cyanides , dirt , rust, hexavalent chromium compounds.
Hazardous decomposition products:	Oxygen, which will support combustion.

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.

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

Acute toxicity:

Oral LD50 (rat): 431 mg/kg (ATE)

Inhalation LC50 (rat): >0.17 mg/L/4h (ATE)

Respiratory or skin sensitisation: Not a skin sensitiser.

Chronic effects: Available evidence from animal studies indicate that repeated or prolonged exposure to this material could result in effects on the lungs. Hydrogen peroxide is an IARC Group 3 carcinogen (not classifiable as to human carcinogenicity).

Mutagenicity: Positive (Ames)
Reproductive toxicity: No information available.
Specific Target Organ Toxicity (STOT) - single exposure: May cause respiratory irritation.
Specific Target Organ Toxicity (STOT) - repeated exposure: Not classified.
Aspiration hazard: No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity Avoid contaminating waterways.

13. DISPOSAL CONSIDERATIONS

Disposal methods:

Refer to local government authority for disposal recommendations. Dispose of contents/container in accordance with local/regional/national/international regulations.

14. TRANSPORT INFORMATION

Road and Rail Transport

Classified as a Dangerous Good according to NZS 5433:2012 Transport of Dangerous Goods on Land.



UN No: 2014
Transport Hazard Class: 5.1 Oxidizing Agent
Subrisk 1: 8 Corrosive
Packing Group: II
Proper Shipping Name or Technical Name: HYDROGEN PEROXIDE, AQUEOUS SOLUTION
Hazchem or Emergency Action Code: 2P

Marine Transport

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

UN No: 2014

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Transport Hazard Class: 5.1 Oxidizing Agent
Subrisk 1: 8 Corrosive
Packing Group: II
Proper Shipping Name or Technical Name: HYDROGEN PEROXIDE, AQUEOUS SOLUTION

IMDG EMS Fire: F-H
IMDG EMS Spill: S-Q

Air Transport

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS. TRANSPORT PROHIBITED under the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air in Passenger and Cargo Aircraft, and Cargo Aircraft Only.

UN No: 2014
Transport Hazard Class: 5.1 Oxidizing Agent
Subrisk 1: 8 Corrosive
Packing Group: II
Proper Shipping Name or Technical Name: HYDROGEN PEROXIDE, AQUEOUS SOLUTION

15. REGULATORY INFORMATION

Classification:

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017 and the Hazardous Substances (Classification) Notice 2017.

Subclasses:

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Subclass 8.2 Category B - Substances that are corrosive to dermal tissue.

Subclass 8.3 Category A - Substances that are corrosive to ocular tissue.

Subclass 9.1 Category D - Substances that are slightly harmful to the aquatic environment or are otherwise designed for biocidal action.

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H433 Harmful to terrestrial vertebrates.

16. OTHER INFORMATION

Supplier Safety Data Sheet; 07/ 2016.

Safety Data Sheet



This safety data sheet has been prepared by Ixom Operations Pty Ltd (Toxicology & SDS Services).

Reason(s) for Issue:

5 Yearly Revised Primary SDS

This SDS 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 Ixom Operations Pty Ltd 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 Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.

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