

SAFETY DATA SHEET



METHSAN (A)

ACTICHEM PTY LTD

Catalogue number: DR610

Version No: 1.1

Issue date: 09/08/2023

Safety Data Sheet according to WHS and ADG requirements

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	MethSan (A)
Product code	DR610
Pack sizes	5L & 20L

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Hydrogen peroxide-based bio and chemical decontaminant
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Details of the supplier of the safety data sheet

Registered company name	ACTICHEM PTY LTD
Address	11 Gamma Close, Beresfield 2322 NSW Australia
Telephone	(02) 4966 5516
Website	www.actichem.com.au
Email	info@actichem.com.au

Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	13 11 26
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

Poisons Schedule	Not Applicable
GHS Classification	Eye Irritation Category 2, <i>Classification drawn from HCIS and ECHA C&L Inventory.</i>

Label elements

Hazard pictogram	
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SIGNAL WORD	WARNING
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Hazard statement(s)

H319	Causes serious eye irritation
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Precautionary statement(s) Prevention

P280	Wear protective gloves and eye protection.
P264	Wash exposed skin thoroughly after handling

Precautionary statement(s) Response

P305+P351+P338+P337+P313	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
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Precautionary statement(s) Storage

Not applicable

Precautionary statement(s) Disposal

Not applicable

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures.

Mixtures

CAS No	%[weight]	Name
7722-84-1	<8%	hydrogen peroxide

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: Wash out immediately with fresh running water for 10-15 minutes. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. If pain persists or recurs seek medical attention. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
Ingestion	Immediately give a glass of water. Do NOT induce vomiting. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Indication of any immediate medical attention and special treatment needed.

Hydrogen peroxide at moderate concentrations (5% or more) is a strong oxidant.

- ▶ Direct contact with the eye is likely to cause corneal damage especially if not washed immediately. Careful ophthalmologic evaluation is recommended, and the possibility of local corticosteroid therapy should be considered.
- ▶ Because of the likelihood of systemic effects attempts at evacuating the stomach via emesis induction or gastric lavage should be avoided.
- ▶ There is remote possibility, however, that a nasogastric or gastric tube may be required for the reduction of severe distension due to gas formation.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

Extinguishing media	FOR SMALL FIRE: USE FLOODING QUANTITIES OF WATER. FOR LARGE FIRE: Flood fire area with water from a protected position. DO NOT use dry chemical, CO ₂ , foam or halogenated-type extinguishers. NOTE: Chemical extinguishing agents may accelerate decomposition. [CCINFO]
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Special hazards arising from the substrate or mixture.

Fire incompatibilities	None known
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Advice for firefighters

Fire fighting	Alert Fire Brigade and tell them location and nature of hazard. Product will produce oxygen which will support and stimulate combustion. Wear breathing apparatus plus protective gloves in the event of a fire. Use firefighting procedures suitable for surrounding area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire.
Fire/Explosion Hazard	Non-combustible. Not considered to be a significant fire risk. Expansion or decomposition on heating may lead to violent rupture of containers.
HAZCHEM	2P

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable, labelled container for waste disposal.
Major Spills	Control personal contact with the substance, by using protective equipment as required. Prevent spillage from entering drains or water ways. Absorb on sand, dirt, vermiculite or similar absorbent material. Place into labelled drums and dispose of according to local government regulations. Immediately notify emergency services (Police or Fire Brigade) if the spill is too large for you to safely and effectively handle.
PPE	Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Store in containers with vented lids Avoid physical damage to containers.
Other information	Store away from incompatible materials.

Conditions for safe storage, including any incompatibilities.

Suitable container	Store only in original container
Storage incompatibility	Avoid storage with reducing agents, acids and alkalis. Avoid storage with combustible organic matter.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	hydrogen peroxide	Hydrogen peroxide	1.4 mg/m3 / 1 ppm	Not Available	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
hydrogen peroxide	Hydrogen peroxide 8%	33 ppm	170 ppm	330 ppm

Ingredient	Original IDLH	Revised IDLH
hydrogen peroxide	75 ppm	75 [Unch] ppm

Exposure controls

Appropriate engineering controls	Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate. If ventilation is poor, then the use of a local exhaust ventilation system is recommended.
Personal protection	 
Eye and face protection	Safety glasses with side shields OR Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. Lens should be removed at the first signs of eye redness or irritation. - Lens should be removed in a clean environment only after workers have washed hands thoroughly.
Skin protection	See Hand protection below
Hands/feet protection	Wear chemical protective gloves. Neoprene is recommended for this application
Body protection	See Other protection below
Other protection	Overalls, P.V.C. apron. Barrier cream. Skin cleansing cream. Eye wash unit.
Thermal hazards	Not Available

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear liquid		
Physical state	Liquid	Relative density (Water = 1)	1.0
Odour	Mild peroxide odour	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	6.2	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur. Solutions of hydrogen peroxide slowly decompose, releasing oxygen.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	The material is not thought to produce either adverse health effects or irritation of the respiratory tract following inhalation (as classified by EC Directives using animal models). Inhaling excessive levels of mist may result in headache, dizziness, vomiting, diarrhoea, irritability, sleeplessness and fluid in the lungs, and cause extreme irritation of the nose and chest, cough, discomfort, shortness of breath and inflammation of the nose and throat.
Ingestion	Accidental ingestion of the material may be harmful and may produce serious damage to the health of the individual. Hydrogen peroxide may cause blistering and bleeding from the throat and stomach. When swallowed, it may release large quantities of oxygen which could hyper-distend the stomach and gut and may cause internal bleeding, mouth and throat burns and rupture of the gut.
Skin Contact	Skin contact is not thought to produce harmful health effects (as classified under EC Directives using animal models).
Eye	If applied to the eyes, this material causes severe eye damage.
Chronic	Long-term exposure to the product is not thought to produce chronic effects adverse to the health.

Toxicological effects of ingredients

Hydrogen Peroxide 50%	Acute toxicity	Oral LD50 (rat) 1127 mg/kg (calculated)
	Skin corrosion/irritation	Highly irritating
	Eye damage/irritation	Corrosive
	Respiratory/skin sensitization	Not sensitising.
	Germ cell mutagenicity	No adverse effect observed (negative)
	Carcinogenicity	Not a carcinogenic substance according to MAK, IARC, NTP, OSHA, ACGIH
	Reproductive toxicity	No available data
	STOT (single exposure)	No available data
	STOT (repeated exposure)	No available data
	Aspiration toxicity	No available data

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

	Endpoint	Duration (Hr.)	Species	Value
Hydrogen peroxide 50%	LC50	96	Fish	0.020 mg/l
	EC50	3	Algae or other aquatic plants	0.27 mg/l
	EC50	48	Crustacea	2.32 mg/l
	EC50	72	Algae or other aquatic plants	0.71 mg/l
	NOEC	192	Fish	0.028 mg/l

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
hydrogen peroxide	LOW	LOW

Bio accumulative potential

Ingredient	Bioaccumulation
hydrogen peroxide	LOW (LogKOW = -1.571)

Mobility in soil

Ingredient	Mobility
hydrogen peroxide	LOW (KOC = 14.3)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / packaging disposal	Recycle containers whenever possible. Product residues and containers should be disposed of in accordance with local government regulations
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SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO
HAZCHEM	Not applicable

Land transport – NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

HYDROGEN PEROXIDE IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6
Australian Inventory of Industrial Chemicals (AIIC)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

SECTION 16 OTHER INFORMATION

Revision Schedule

Revision Date	Not applicable
Initial Date	09/08/2023

SDS Version Summary

Version	Issue Date	Sections Updated
1.1	09/08/2023	All sections originated

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources such as the ECHA C&L Chemical Inventory, HSNO (CCID) New Zealand, AICIS and HCIS Australia

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Definitions and abbreviations

PC-TWA;	Permissible Concentration-Time Weighted Average
PC-STEL:	Permissible Concentration-Short Term Exposure Limit
IARC:	International Agency for Research on Cancer
ACGIH:	American Conference of Government Industrial Hygienists
STEL:	Short Term Exposure Limit
TEEL:	Temporary Emergency Exposure Limit
IDLH:	Immediate Danger to Life or Health Concentrations
OSF:	Odour Safety Factor
NOAEL:	No Observed Effects Level
TLV:	Threshold Limit Value
LOD:	Limit Of Detection
OTV:	Odour Threshold Value
BCF:	Bio Concentration Factors
BEI:	Biological Exposure Index

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End of SDS