

SAFETY DATA SHEET



HYDROGEN PEROXIDE 50%

APPLIED PRODUCTS AUSTRALIA PTY LTD

Catalogue number: AP869

Version No: 1.2

Issue date: 06/01/2017

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	HYDROGEN PEROXIDE 50%
Synonyms	AP869
Proper shipping name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 20% but not more than 60% hydrogen peroxide (stabilized as necessary)
Other means of identification	Not Available

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

Relevant identified uses	Oxygen bleach and sanitiser
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Details of the manufacturer/importer

Registered company name	APPLIED PRODUCTS AUSTRALIA PTY LTD
Address	11 Gamma Close, Beresfield 2322 NSW Australia
Telephone	(02) 4966 5516
Fax	(02) 4966 5510
Website	www.actichem.com.au
Email	info@actichem.com.au

Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	13 1126
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

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

Poisons Schedule	6
GHS Classification ^[1]	Serious Eye Damage Category 1, Oxidizing Liquid Category 2, Skin Corrosion/Irritation Category 1A, Acute Toxicity (Oral) Category 4.
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

Label elements

Label elements	
SIGNAL WORD	DANGER

Hazard statement(s)

H318	Causes serious eye damage
H272	May intensify fire; oxidizer
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage

Precautionary statement(s) Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P221	Take any precaution to avoid mixing with combustibles / organic material
P260	Do not breathe vapours or spray.
P280	Wear protective gloves / protective clothing / eye protection.
P220	Keep / Store away from clothing / organic material / combustible materials.
P234	Keep only in original container.
P270	Do not eat, drink or smoke when using this product.

Precautionary statement(s) Response

P301+P310+P330+P331	IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting.
P303+P310+P361+P363+P353	IF ON SKIN (or hair): Immediately call a POISON CENTER or doctor. Take off immediately all contaminated clothing and wash before reuse. Rinse skin with water/shower.
P305+P351+P338	IF IN EYES: Immediately call a POISON CENTER or doctor. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P310+P340	IF INHALED: Immediately call a POISON CENTER or doctor. Remove person to fresh air and keep at rest in a position comfortable for breathing.
P370+P378	In case of fire: Use alcohol resistant foam or fine spray/water fog for extinction.
P390	Absorb spillage to prevent material damage.

Precautionary statement(s) Storage

P405	Store locked up.
P410	Protect from sunlight.

Precautionary statement(s) Disposal

P501	Dispose of contents/container in accordance with local regulations.
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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS**Substances**

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
7722-84-1	50	hydrogen peroxide

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4 FIRST AID MEASURES**Description of first aid measures**

Eye Contact	<p>If this product comes in contact with the eyes:</p> <p>Obtain medical advice / attention without delay.</p> <p>Immediately hold eyelids apart and flush the eye continuously with running water.</p> <p>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.</p> <p>Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.</p> <p>If advised to do so, transport to hospital or doctor without delay.</p> <p>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</p>
Skin Contact	<p>If skin or hair contact occurs:</p> <p>Obtain medical advice without delay.</p> <p>Immediately flush body and clothes with large amounts of water, using safety shower if available.</p> <p>Quickly remove all contaminated clothing, including footwear.</p> <p>Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre.</p> <p>If necessary, transport to hospital, or doctor.</p>
Inhalation	<p>If fumes or combustion products are inhaled remove from contaminated area.</p> <p>Lay patient down. Keep warm and rested.</p> <p>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</p> <p>Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained.</p> <p>Perform CPR if necessary.</p> <p>Transport to hospital, or doctor, without delay.</p> <p>Inhalation of vapours or aerosols (mists, fumes) may cause lung oedema.</p> <p>As this reaction may be delayed up to 24 hours after exposure, affected individuals need complete rest (preferably in semi-recumbent posture) and must be kept under medical observation even if no symptoms are (yet) manifested.</p> <p>Before any such manifestation, the administration of a spray containing a dexamethasone derivative or beclomethasone derivative may be considered.</p> <p>This must definitely be left to a doctor or person authorised by him/her.</p>
Ingestion	<p>For advice, contact a Poisons Information Centre or a doctor at once.</p> <p>Urgent hospital treatment is likely to be needed.</p> <p>If swallowed do NOT induce vomiting.</p> <p>If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</p> <p>Observe the patient carefully.</p> <p>Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</p> <p>Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</p> <p>If advised to do so, transport to hospital or doctor without delay.</p>

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

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	<p>NOTE: Chemical extinguishing agents may accelerate decomposition. [CCINFO] FOR SMALL FIRE: USE FLOODING QUANTITIES OF WATER. DO NOT use dry chemical, CO₂, foam or halogenated-type extinguishers. FOR LARGE FIRE Flood fire area with water from a protected position</p>
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Special hazards arising from the substrate or mixture

Fire incompatibility	Avoid storage with reducing agents.
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Advice for firefighters

Fire Fighting	<p>Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. 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. Equipment should be thoroughly decontaminated after use.</p>
Fire/Explosion Hazard	<p>Will not burn but increases intensity of fire. Heating may cause expansion or decomposition leading to violent rupture of containers. Heat affected containers remain hazardous. Contact with combustibles such as wood, paper, oil or finely divided metal may produce spontaneous combustion or violent decomposition. May emit irritating, poisonous or corrosive fumes.</p>

SECTION 6 ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Minor Spills	<p>Clean up all spills immediately. No smoking, naked lights, ignition sources. Avoid all contact with any organic matter including fuel, solvents, sawdust, paper or cloth and other incompatible materials, as ignition may result. Avoid breathing vapours and all contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Flush away with copious amounts of water.</p>
Major Spills	<p>Clear area of personnel and move upwind. May be violently or explosively reactive. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. No smoking, flames or ignition sources. Increase ventilation. NEVER use organic absorbents such as sawdust, paper, and cloth; as fire may result. 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.</p>
	Personal Protective Equipment advice is contained in Section 8 of the SDS

SECTION 7 HANDLING AND STORAGE**Precautions for safe handling**

Safe handling	<p>DO NOT allow clothing wet with material to stay in contact with skin Avoid personal contact and inhalation mist or vapours. Provide adequate ventilation. Always wear protective equipment and wash off any spillage from clothing. Keep material away from light, heat, flammables or combustibles. Keep cool, dry and away from incompatible materials. Avoid physical damage to containers. DO NOT repack or return unused portions to original containers. Withdraw only sufficient amounts for immediate use. Use only minimum quantity required. Avoid using solutions of peroxides in volatile solvents.</p>
Other information	<p>Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store under cover and away from sunlight Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS.</p>

Conditions for safe storage, including any incompatibilities

Suitable container	Keep only in original container.
Storage incompatibility	Hydrogen peroxide is a powerful oxidiser Reacts dangerously with rust, dust, dirt, iron, copper, acids, metals and salts, organic material. Reacts violently with reducing agents, alcohols and other organic solvents. Avoid heat.

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/m ³ / 1 ppm	Not Available	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
hydrogen peroxide	Hydrogen peroxide - 30%	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	Chemical goggles. Full face shield may be required for supplementary but never for primary protection of eyes. 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 elbow length chemical protective gloves. Neoprene is recommended for this application. When handling corrosive liquids, wear trousers or overalls outside of boots, to avoid spills entering boots.
Body protection	See Other protection below
Other protection	Overalls. PVC Apron. Eyewash unit.
Thermal hazards	Not Available

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Appearance	Clear colourless liquid
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Physical state	Liquid	Relative density (Water = 1)	1.132
Odour	Not Available	Molecular weight (g/mol)	34.02
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Applicable
pH (as supplied)	3.5	Decomposition temperature	Not Available
Melting point / freezing point (°C)	-33	Surface Tension (dyn/cm or mN/m)	Not Available
Initial boiling point and boiling range (°C)	108	Partition coefficient n-octanol / water	Not Available
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Flammable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Viscosity (cSt)	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, and so are often stabilised by the addition of acetanilide, etc.
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 can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may produce serious damage to the health of the individual. Inhalation of quantities of liquid mist may be extremely hazardous, even lethal due to spasm, extreme irritation of larynx and bronchi, chemical pneumonitis and pulmonary oedema. 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. Whole-body effects of hydrogen peroxide poisoning include tremor, numbness of the limbs, convulsions, coma and shock. Hydrogen peroxide has poor warning properties.
Ingestion	Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual. The material can produce chemical burns within the oral cavity and gastrointestinal tract following ingestion. 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. There may also be fever, nausea, foaming at the mouth, vomiting, and chest and stomach pain, loss of consciousness, and movement disorders and death. Large amounts can also cause cessation of breath, dizziness, headache, tremors weakness or numbness in the extremities and convulsions.
Skin Contact	The material can produce chemical burns following direct contact with the skin. Skin contact is not thought to produce harmful <u>health</u> effects (as classified under EC Directives using animal models). However material may still produce health damage following entry through wounds, lesions or abrasions. Examine skin before use and insure that any wounds, lesions or abrasions are suitably protected Skin contact will result in rapid drying, bleaching, and leading to chemical burns on prolonged contact.
Eye	The material can produce chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating. Hydrogen peroxide concentrations above 10% are corrosive to the eye and may cause corneal ulceration even days after exposure
Chronic	Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems.

SECTION 12 ECOLOGICAL INFORMATION**Toxicity****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	2P

Land transport (ADG)

UN number	2014				
Packing group	II				
UN proper shipping name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 20% but not more than 60% hydrogen peroxide (stabilized as necessary)				
Environmental hazard	No relevant data				
Transport hazard class(es)	<table border="1"> <tr> <td>Class</td> <td>5.1</td> </tr> <tr> <td>Sub risk</td> <td>8</td> </tr> </table>	Class	5.1	Sub risk	8
Class	5.1				
Sub risk	8				
Special precautions for user	<table border="1"> <tr> <td>Special provisions</td> <td>Not Applicable</td> </tr> <tr> <td>Limited quantity</td> <td>1 L</td> </tr> </table>	Special provisions	Not Applicable	Limited quantity	1 L
Special provisions	Not Applicable				
Limited quantity	1 L				

SECTION 15 REGULATORY INFORMATION

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

HYDROGEN PEROXIDE (7722-84-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards
Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
International Air Transport Association (IATA) Dangerous Goods Regulations - Prohibited List Passenger and Cargo Aircraft

SECTION 16 OTHER INFORMATION

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at: www.chemwatch.net

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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