

## Material Safety Data Sheet

Date Printed: 11/SEP/2005

Date Updated: 09/FEB/2005

Version 1.0

According to 91/155/EEC

Classified as Hazardous according to the criteria of EU Annex 1 and NOHSC.

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1 - Product and Company Information

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Product Name	HYDROGEN PEROXIDE 30% (W/W) SOLUTION
Product Number	H1009
Company	Sigma-Aldrich Pty. Ltd. 12 Anella Avenue Castle Hill NSW 2154 Australia
Technical Phone #	+61 2 9841 0555 (1800 800 097)
Fax	+61 2 9841 0500 (1800 800 096)
Emergency Phone #	+44 8701906777 (1800 448 465)

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2 - Composition/Information on Ingredients

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Product Name	CAS #	EC no	Annex I Index Number	
HYDROGEN PEROXIDE, 30% SOLUTION	7722-84-1	231-765-0	008-003-00-9	
Ingredient Name	Percent	CAS #	EC no	Annex I Index Number
HYDROGEN PEROXIDE	30	7722-84-1	231-765-0	008-003-00-9
Symbols: O-C				
R-Phrases: 5-8-20/22-35				
Heating may cause an explosion. Contact with combustible material may cause fire. Harmful by inhalation and if swallowed. Causes severe burns.				
WATER	70	7732-18-5	231-791-2	None
Formula	H2O2			
Synonyms	Albone 35 * Albone 50 * Albone 70 * Albone 35CG * Albone 50CG * Albone 70CG * Hydrogen peroxide, solution, 30% * Interlox * Kastone * Perone 30 * Perone 35 * Perone 50			

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3 - Hazards Identification

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SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT  
Harmful if swallowed. Risk of serious damage to eyes.

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4 - First Aid Measures

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## AFTER INHALATION

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

## AFTER SKIN CONTACT

In case of contact, immediately wash skin with soap and copious

amounts of water.

#### AFTER EYE CONTACT

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

#### AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

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### 5 - Fire Fighting Measures

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#### EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

#### SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions.

#### SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

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### 6 - Accidental Release Measures

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PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL  
Evacuate area.

#### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

#### METHODS FOR CLEANING UP

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

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### 7 - Handling and Storage

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#### HANDLING

Directions for Safe Handling: Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

#### STORAGE

Conditions of Storage: Keep tightly closed.  
Store at 2-8°C

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### 8 - Exposure Controls / Personal Protection

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#### ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

#### GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

#### PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Government approved respirator.  
Hand Protection: Compatible chemical-resistant gloves.  
Eye Protection: Chemical safety goggles.

## 9 - Physical and Chemical Properties

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Appearance	Physical State: Clear liquid Color: Colorless	
Property	Value	At Temperature or Pressure
pH	N/A	
BP/BP Range	N/A	
MP/MP Range	N/A	
Flash Point	N/A	
Flammability	N/A	
Autoignition Temp	N/A	
Oxidizing Properties	N/A	
Explosive Properties	N/A	
Explosion Limits	N/A	
Vapor Pressure	N/A	
SG/Density	1.11 g/cm3	
Partition Coefficient	N/A	
Viscosity	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
Evaporation Rate	N/A	
Bulk Density	N/A	
Decomposition Temp.	N/A	
Solvent Content	N/A	
Water Content	N/A	
Surface Tension	N/A	
Conductivity	N/A	
Miscellaneous Data	N/A	
Solubility	N/A	

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## 10 - Stability and Reactivity

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### STABILITY

Stable: Stable.

Materials to Avoid: Strong oxidizing agents.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: .

### HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

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## 11 - Toxicological Information

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RTECS NUMBER: MX0899000

### ACUTE TOXICITY

LDLO

Oral

Woman

2.626 mg/kg

Remarks: Gastrointestinal:Nausea or vomiting. Lungs, Thorax, or  
Respiration:Cyanosis. Behavioral:Coma.

LDLO

Oral

Man

1429 mg/kg

Remarks: Behavioral:Coma. Gastrointestinal:Nausea or vomiting.

Gastrointestinal:Changes in structure or function of esophagus.

LD50  
Skin  
Rat  
3000 mg/kg

LD50  
Intravenous  
Mouse  
>50 GM/KG

LD50  
Oral  
Rabbit  
820 mg/kg  
Remarks: Gastrointestinal:Peritonitis. Blood:Pigmented or nucleated red blood cells. Blood:Changes in leukocyte (WBC) count.

#### SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.  
Skin Absorption: May be harmful if absorbed through the skin.  
Eye Contact: Causes severe eye irritation.  
Inhalation: Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.  
Ingestion: Harmful if swallowed.

#### TARGET ORGAN INFORMATION

Eyes. Respiratory system. Skin.

#### CHRONIC EXPOSURE - CARCINOGEN

Result: This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

Mouse  
Route of Application: Oral  
Exposure Time: 2Y  
Result: Gastrointestinal:Tumors. Tumorigenic:Carcinogenic by RTECS criteria.

Mouse  
Route of Application: Oral  
Exposure Time: 2Y  
Result: Gastrointestinal:Tumors. Tumorigenic:Carcinogenic by RTECS criteria.

#### IARC CARCINOGEN LIST

Rating: Group 3

#### CHRONIC EXPOSURE - MUTAGEN

Human  
9 UMOL/L  
Cell Type: lymphocyte  
DNA damage

Human  
50 UMOL/L  
Cell Type: Embryo  
Other mutation test systems

Human  
20 UMOL/L  
Cell Type: Embryo  
Cytogenetic analysis

Rat  
50 UMOL/L  
Cell Type: lymphocyte  
DNA damage

Hamster  
250 UMOL/L  
Cell Type: ovary  
DNA inhibition

Hamster  
60 UMOL/L  
Cell Type: ovary  
Cytogenetic analysis

Hamster  
40 UMOL/L  
Cell Type: ovary  
Sister chromatid exchange

Hamster  
1 MMOL/L  
Cell Type: lung  
Mutation in mammalian somatic cells.

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## 12 - Ecological Information

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No data available.

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## 13 - Disposal Considerations

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### SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

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## 14 - Transport Information

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### RID/ADR

UN#: 2014  
Class: 5.1  
PG: II  
Proper Shipping Name: Hydrogen peroxide, aqueous solution

### IMDG

UN#: 2014  
Class: 5.1  
PG: II

Subrisk: 8  
Proper Shipping Name: Hydrogen peroxide, aqueous  
solution  
Marine Pollutant: No  
Severe Marine Pollutant: No

#### IATA

UN#: 2014  
Class: 5.1  
PG: II  
Subrisk: 8  
Proper Shipping Name: Hydrogen peroxide, aqueous  
solution  
Inhalation Packing Group I: No

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#### 15 - Regulatory Information

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##### CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

ANNEX I INDEX NUMBER: 008-003-00-9

INDICATION OF DANGER: Xn

Harmful.

R-PHRASES: 22-41

Harmful if swallowed. Risk of serious damage to eyes.

S-PHRASES: 26-39

In case of contact with eyes, rinse immediately with plenty of  
water and seek medical advice. Wear eye/face protection.

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#### 16 - Other Information

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##### WARRANTY

The above information is believed to be correct but does not  
purport to be all inclusive and shall be used only as a guide. The  
information in this document is based on the present state of our  
knowledge and is applicable to the product with regard to  
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