

FOR FURTHER INFORMATION, PLEASE REFER TO THE SDS

Issue: November 16

PRODUCT: Diacetone Alcohol
Other Names: Propylene glycol monomethyl ether acetate,
1-methoxy-2-propyl acetate
Uses: Industrial solvent

UN No.	1148
Dangerous Goods Class	3
Subsidiary Risk	None
Pack Group	III
Hazchem	•2Y
Poison Schedule	N/A

Hazardous Nature:	This product is classified as hazardous under GHS for Australia criteria
Exposure Standards:	From National Occupational Health & Safety Commission (NOHSC) Worksafe Australia - Diacetone Alcohol: 238mg/m ³ (50ppm) TWA.

Physical Characteristics (Typical)

Section 9 of SDS

Appearance	Clear, colourless liquid
Boiling Point/ Range (°C):	150- 172
Flash Point (°C):	54 (CC)
Specific Gravity/ Density (g/ml @ 15°C):	N /A
Chemical Stability:	Stable at room temperature and pressure

Product Ingredients

Section 3 of SDS

Ingredients Names and Proportions

Chemical Entity	CAS Number	Proportion (%)
Diacetone Alcohol	123-42-2	100

GHS Pictograms

Section 2 of SDS



For further Risk and Safety information, please refer to the full SDS.

DEFINITIONS

Dangerous Goods	Products that are classified as Dangerous for Storage and Transport: these products are allocated a UN No., with accompanying Class, Pack Group, and Sub. Risk, if required. Products that do not have a specific description under the code, but have low flash points, or such, must be classified under their most significant risk, eg. Flammable Goods N.O.S. (Not otherwise specified), UN 1993
Poisonous Substance	Products that are classified under the poisons schedule are a poisonous substance. The proportion of the poison in the product will determine its numerical classification.
Hazardous Substance	Products are considered to be Hazardous if they pose an intrinsic risk to human or environmental health, such as mutagens (able to change DNA), teratogens (able to result in birth defects), carcinogens (able to generate cell abnormalities), etc. Materials are not hazardous substances if they pose risks such as potential for misuse, like flammability, or explosions when heated and ignited.

SUMMARY INFORMATION ONLY

1. IDENTIFICATION



Product Name: Diacetone Alcohol
Other Names: 4-Hydroxy-4-Methyl-2Pentanone
Chemical Family: N/A
Recommended Use: Industrial solvent
Supplier: Melbourne Solvents
ABN: 48611886590
Street Address: 2/42-46 Hallam South Rd. Hallam, Victoria 3803, Australia
Telephone: 03 9605 9333

Emergency phone: CHEMCALL: 1800 127 406
All other inquiries: 1800 60 50 40

2. HAZARDS IDENTIFICATION

Hazardous chemical	<i>according to classification by Safe Work Australia</i>
Dangerous goods	<i>according to the Australian Code for the Transport of Dangerous Goods by Road and Rail</i>

Signal Word	WARNING
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Hazardous chemical classification	Pictogram	Hazard statement
Flammable Liquids, Category 3	 FLAME	H226 Flammable liquid and vapour
Serious Eye Damage/Irritation, Category 2A	 EXCLAMATION MARK	H319 Causes serious eye irritation

Precautionary statements:

GENERAL	
P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P103	Read label before use
PREVENTATIVE	
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P233	Keep container tightly closed
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical/ventilation/lighting equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P264	Wash thoroughly after handling
P280	Wear protective gloves/eye protection/face protection
RESPONSE	
P303 + P361 + P353	IF ON SKIN (or hair): Take off contaminated clothing and wash before reuse. Rinse skin with water/shower
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337 + P313	If eye irritation persists: Get medical advice/attention
P370 + P378	In case of fire: Use foam/water spray/fog for extinction
STORAGE	
P403 + P235	Store in a well-ventilated place. Keep cool
DISPOSAL	
P501	Dispose of contents/container in accordance with local regulations

3. COMPOSITION: Information on Ingredients

Ingredients Names and Proportions

Chemical Entity	CAS Number	Proportion (%)
Diacetone Alcohol	123-42-2	100

4. FIRST AID MEASURES

Description of necessary first aid measures

Inhalation:	Remove victim from exposure if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment. Remove contaminated clothing
Skin Contact:	If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water and follow by washing with soap if available.
Eye Contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes or until advised to do so by a Poisons Information Centre or a doctor.
Ingestion:	If swallowed, do NOT induce vomiting. Rinse mouth with water. Seek medical assistance.

Symptoms caused by exposure

Ingestion:	May cause nausea, vomiting and central nervous system depression (similar to drunkenness). If vomiting occurs aspiration into lungs may cause pneumonitis.
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Medical attention and special treatment
Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable extinguishing equipment
Foam, dry agents (chemical powder, carbon dioxide) water spray or fog.

Specific hazards arising from the chemical
Carbon monoxide and/or carbon dioxide may be evolved.

Special protective equipment and precautions for fire fighters
Wear full protective clothing and self-contained breathing apparatus. Hazchem code ●2Y.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Avoid contact with spilled or released material. Shut off leaks, if possible without personal risks. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Remove all sources of ignition in the surrounding area. Take precautionary measure against static discharge. Ensure electrical continuity by bonding and earthing all equipment.

Environmental precautions
Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterway using sand, earth or other appropriate barriers.

Methods and materials for containment and cleaning up
For spills, collect and seal in properly labelled containers or drum for safe disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Flammable liquid. Avoid breathing material and contact with skin and eyes and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in contaminated areas. Handle and open containers with care in a well-ventilated area. Ensure that the workplace is ventilated such that the Occupational Exposure limit is not exceeded. Do not empty into drains.

Conditions for safe storage, including any incompatibilities

Store in a cool, well-ventilated area. Do not store near strong oxidants. Store away from heat or sources of ignition.

8. EXPOSURE CONTROLS: PERSONAL PROTECTION

Exposure control measures

From National Occupational Health & Safety Commission (NOHSC) Worksafe Australia - Diacetone Alcohol: 238mg/m³ (50ppm) TWA.

Biological monitoring

No biological limit allocated.

Engineering controls

Ensure that adequate ventilation is provided. Avoid generating and inhaling mists and vapours. Keep containers closed when not in use.

Individual protection measures

Eye and face protection:	Wear safety goggles.
Skin protection:	Use solvent resistant gloves, nitrile for longer term protection or PVC and neoprene for incidental splashes.
Respiratory protection:	If work practices do not maintain adequate airborne levels, use appropriate respiratory protection equipment. When using respirators, select an appropriate combination of mask and filter. Select a filter for organic gases and vapours (boiling point > 65°C). Respirators should comply with AS1716 or an equivalent approved by a state/territory authority.
Thermal hazards:	Not applicable.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear liquid
Odour:	Characteristic
Odour threshold (ppm):	Data not available
pH:	Data not available
Melting point/freezing point (°C):	-44
Initial boiling point and boiling range (°C):	150 - 172
Flash point (°C):	54 (CC)
Evaporation rate (Butyl acetate = 1):	0.15
Flammability:	Flammable
Upper/lower flammability or explosive limits (%):	1.8 – 6.9
Vapour pressure (kPa @ 20°C):	0.12
Vapour density (air = 1):	4
Density (g/ml @ 20°C):	0.94
Solubility:	Soluble in water

Partition coefficient: n-octanol/water:	Data not available
Auto-ignition temperature (°C):	620
Decomposition temperature (°C):	Data not available
Kinematic viscosity (mm ² /s @ 20°C):	Data not available

The values listed are indicative of this product's physical and chemical properties. For a full product specification, please consult the Product Data Sheet.

**10. STABILITY AND
REACTIVITY**

Reactivity

Stable under normal conditions of use.

Chemical stability

Stable under normal conditions of use.

Possibility of hazardous reactions

Stable under normal conditions of use.

Product: DIACETONE ALCOHOL

Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

Incompatible materials

Strong oxidising agents and strong acids.

Hazardous decomposition products

Burning can produce carbon monoxide and/or carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	Low toxicity – Oral LD50 (rat): >2000mg/kg Skin LD50 (rabbit): >2000mg/kg Inhalation LC50 greater than near saturated vapour concentration/ 4 hour (rat).
Skin corrosion/irritation:	Slightly irritating to skin.
Serious eye damage/irritation:	A severe eye irritant. High vapour concentration may also cause irritation.
Respiratory or skin sensitisation:	Not expected to cause sensitisation
Germ cell mutagenicity:	Not expected to be mutagenic
Carcinogenicity:	Not expected to be carcinogenic
Reproductive toxicity:	Not expected to impair fertility
Specific Target Organ Toxicity (STOT) – single exposure:	Breathing in high concentrations can produce central nervous system depression. Swallowing can cause nausea, vomiting and central nervous system depression.
Specific Target Organ Toxicity (STOT) – repeated exposure:	Prolonged exposure or repeated exposure via skin may cause defatting leading to dermatitis. May cause kidney and liver damage.
Aspiration hazard:	Data not available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Acute toxicity:

Fish –	Low toxicity: LC/EC/IC50 > 100mg/l
Aquatic invertebrate –	Low toxicity: LC/EC/IC50 > 1000mg/l
Algae –	Expected to have low toxicity: LC/EC/IC50 > 1000mg/l
Microorganisms –	Low toxicity: LC/EC/IC50 > 1000mg/l

Chronic toxicity:

Fish –	No data available
Aquatic invertebrate –	No data available
Algae –	No data available
Microorganisms –	No data available

Product: DIACETONE ALCOHOL

Persistence and degradability

Readily biodegradable. Oxidises rapidly by photo-chemical reactions in air.

Bioaccumulative potential

Not expected to bioaccumulate.

Mobility in soil

If product enters soil, it will be highly mobile and may contaminate groundwater.

Other adverse effects

No data available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor. Care should be taken to ensure compliance with national and local authorities. Packaging may still contain fumes and vapours that are flammable and harmful. Ensure that empty packaging is allowed to dry.

Special Precautions for Landfill or Incineration

This product is NOT suitable for disposal by either landfill or via municipal sewers, drains, natural streams or rivers.

14. TRANSPORT INFORMATION

UN number:	1148
Proper shipping name:	Diacetone Alcohol
Australian Dangerous Goods class:	3
Australian Dangerous Goods packing group:	III
Hazchem code:	•2Y

15. REGULATORY INFORMATION

Country/ Region: Australia

Inventory: AICS

Status: Listed

Dangerous Goods

Initial Emergency

Response Guide: 16

16. OTHER INFORMATION

Reasons for Issue: Upgrade to GHS SDS; Amalgamated supplier changes in all sections

Abbreviations:

AICS: Australian Inventory of Chemical Substances

CAS Number: Chemical Abstracts Number

IARC: International Agency for Research on Cancer

NOHSC: National Occupational Health and Safety Council

References:

- Supplier Safety Data Sheets
- <http://chem.sis.nlm.nih.gov/chemidplus> (November 15)
- <http://hsis.ascc.gov.au/SearchHS.aspx> (November 15)
- Ecotoxicology data: http://cfpub.epa.gov/ecotox/quick_query.htm (November 15)
- *Sax's Dangerous Properties of Industrial Materials*, Richard J. Lewis Snr., pub. Canada (2000)

The information sourced for the preparation of this document was correct and complete at the time of writing to the best of the writer's knowledge. The document represents the commitment to the company's responsibilities surrounding the supply of this product, undertaken in good faith. This document should be taken as a safety guide for the product and its recommended uses, but is in no way an absolute authority. Please consult the relevant legislation and regulations governing the use and storage of this type of product. For further information, please contact Melbourne Solvents.