AUSTRALIAN CHEMICAL REAGENTS

SAFETY DATA SHEET

Date Prepared: March 2019
Version No: 5

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:	Tetrabutylammonium hydroxide 0.1 Normal in methanol /IPA
Product Code:	2926
Other Names:	Nil
Uses:	Analytical Reagent
Supplier:	Australian Chemical Reagents 38-50 Bedford Street Gillman SA 5013
Contacts:	Telephone: 61 08 84402000 Fax: 61 08 84402001
Emergency Phone:	CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

2. HAZARDS INFORMATION

GHS Classification

Flammable Liquids: Category 2
Acute Toxicity – Oral: Category 3
Acute Toxicity – Dermal: Category 3
Acute Toxicity – Inhalation: Category 3
Specific Target Organ Toxicity – Single Exposure: Category 1

Signal Word(s)

DANGER

Pictogram(s)

Hazard Statement(s)

H225 Highly flammable liquid and vapour.
H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H331 Toxic if inhaled.
H370 Causes damage to organs – eyes.

Precautionary Statement(s)
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/ventilating/lighting/.../equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.
P270 Do not eat, drink, or smoke when using this product.
P271 Contaminated work clothing should not be allowed out of the work place.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P330 Rinse mouth.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P312 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.
P361 Remove/Take off immediately all contaminated clothing.
P363 Wash contaminated clothing before reuse.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P310 Call a POISON CENTER or doctor/physician.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P311 Call a POISON CENTER or doctor/physician.
P370+P378 In case of fire: Use water spray, carbon dioxide or dry chemical for extinction.

Storage P403+P233+P235 Store in a well-ventilated place. Keep container tightly closed. Keep cool.
P405 Store locked up.

Disposal P501 Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients :

Chemical Entity	CAS No	Proportion
Propan-2-ol	[67-63-0]	90%
Methyl alcohol	[64-56-1]	9%
Tetrabutylammonium hydroxide	[2052-49-5]	<1%

4. FIRST AID MEASURES

Safety showers and eye wash facilities should be provided.

Swallowed :
If conscious wash out mouth with water. Seek medical advice. Show this SDS to medical practitioner.

Eye :
Immediately hold eyelids open and flood with water for at least 15 minutes. Obtain medical aid. Show this SDS to medical practitioner.

Skin :
Remove contaminated clothing. Immediately wash skin thoroughly with water and mild soap. Seek medical advice. Show this SDS to medical practitioner. Launder clothing before reuse.

Inhaled :
Remove from contaminated air. Maintain breathing with artificial respiration if necessary. Seek medical assistance. Show this SDS to a doctor.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:
Water spray carbon dioxide, dry chemical powder, or appropriate foam.

Hazards From Combustion Products:

Flammable. Decomposition products include oxides of carbon.

Precautions For Fire Fighters and Special Protective Equipment:

Fire fighters and others who may be exposed to combustion products during fire should wear full protective clothing including positive pressure self-contained breathing apparatus (SCBA). Wear SCBA with full face-piece, operated in positive pressure mode when fighting fires.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures:

Prevent from entering waterways. Restrict access to area. Remove chemicals that can react with the spilled material.

Methods and materials for containment and clean up:

Isolate all ignition sources. Ventilate area. Wear protective clothing. Use inert material such as sand or earth to contain spill or leak. Absorb spills with chemical absorber or vermiculite and dispose of in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling:

Do not get in eyes, on skin, on clothing. Avoid all personal exposure. Do not mix with oxidising agents.

Conditions for Safe Storage:

Flammable liquid storage required. Store sealed in original container in a cool well ventilated situation away from foods and other chemicals. Do not store in direct sunlight. . Refer to AS 1940 - *The storage and handling of flammable and combustible liquids* for storage procedures. Do not store in direct sunlight. Observe good hygiene and housekeeping practices.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National Exposure Standards:

Safe Work Australia – Methanol 262mg/m^3 TWA- Isopropanol 983mg/m^3 TWA 1230 mg/m^3 STEL

Biological Limit Values: No data available.

Engineering Controls:

If mists are likely to be generated maintain atmospheric concentrations well below exposure standards with flameproof extraction ventilation.

Personal Protective Equipment (PPE):

The use of nitrile or neoprene gloves complying with AS 2161 and the use of faceshield, chemical goggles or safety glasses with side shield protection complying with AS/NZS 1337 is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance :	Clear mobile liquid
Odour:	Alcohol
pH:	Not applicable
Boiling Point (^{0}C) :	64-83
Freezing/melting Point:	Not applicable
Vapour Pressure (mm of Hg @ 25^{0}C) :	approx 48
Vapour Density:	Not available
Specific Gravity :	0.8
Flash Point (^{0}C) :	approx cc
Flammability Limits (%) :	LEL 1 UEL 7
Solubility in Water (g/L) :	Soluble

10. STABILITY AND REACTIVITY

Chemical stability:

Stable.

Conditions to avoid:

Heat. Ignition sources.

Incompatible materials:
Oxidizing agents, peroxides, acids, acid chlorides, acid anhydrides, alkali metals, ammonia.
Hazardous decomposition products:
Refer to section 5 (Fire Fighting Measures).
Hazardous reactions:
Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Health Effects:
Swallowed : May be fatal or cause blindness if swallowed. Cannot be made non-poisonous. For methanol oral-human LDLo 143mg/kg; oral - rat LD50 5628 mg/kg. For propan-2-ol oral-man LDLo 5272mg/kg. 100ml can be fatal.

Eye : Irritating to eye tissue. 10mg propan-2-ol applied to rabbit eyes produced moderate irritation. 40mg of methanol applied to rabbit eyes produced moderate irritation.

Skin : Harmful if absorbed through skin. For methanol skin - rabbit LD50 15800 mg/kg. Irritating to skin tissue. 500mg of propan-2-ol applied to rabbit skin produced mild irritation. 500mg of methanol applied to rabbit skin produced moderate irritation after 24 hours.

Inhaled : Harmful if inhaled. For methanol LC50 inhalation rat 64000 ppm / 4hours. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting.

Chronic Effects: Exposure can cause: damage to the eyes, damage to the liver, damage to the heart, damage to the kidneys, gastrointestinal disturbances. May cause convulsions.

12. ECOLOGICAL INFORMATION

Ecotoxicity:
No data available.
Persistence and degradability:
No data available.
Mobility:
No data available.

13. DISPOSAL CONSIDERATIONS

Contact a licensed professional waste disposal service to dispose of this material and container. Observe all federal, state and local environmental regulations.

14. TRANSPORT INFORMATION

UN Number: 1992
UN Proper Shipping Name: FLAMMABLE LQUID TOXIC N.O.S. (contains methanol/isopropanol)
Class and subsidiary risk(s): 3, 6
Packing Group: 11
Hazchem Code: •3WE
Special precautions for user : Nil

15. REGULATORY INFORMATION

Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP):

16. OTHER INFORMATION

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END of SDS