AUSTRALIAN CHEMICAL REAGENTS

SAFETY DATA SHEET

Date Prepared: October 2023
Version No: 2

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:	Nylander's Reagent
Product Code:	1172
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

Skin Corrosion/Irritation: Category 1B
Acute Toxicity – Oral: Category 4
Corrosive to metals: Category 1

Signal Word(s)

DANGER

Pictogram(s)

Hazard Statement(s)

H290 May be corrosive to metals: Category 1
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.

Precautionary Statement(s)

Preventative

P234 Keep only in original container
P260 Do not breathe dusts or mists.
P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair) Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
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 Immediately call a POISON/CENTRE 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.
P390 Absorb spillage to prevent material-damage.

Storage P405 Store locked up.
P406 Store in corrosive resistant/... container with a resistant inner liner.

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

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients :

Chemical Entity	CAS No	Proportion
Potassium hydroxide	[1310-58-3]	8%
Bismuth sub-nitrate	[1304-85-4]	2%
Potassium sodium (+) tartrate	[638-59-5]	4%

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 if irritation persists. 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:
Potassium hydroxide and its solutions will not burn or support combustion. However contact with aluminium, zinc or tin may generate explosive hydrogen gas. Decomposition products include potassium oxide.

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. Spills are slippery.

Methods and materials for containment and clean up:
Wear appropriate personal; protective equipment. 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 prolonged or repeated exposure.
Conditions for Safe Storage:
Store sealed in original container in a cool well ventilated situation away from foods and other chemicals. Do not store in direct sunlight. Observe good hygiene and housekeeping practices.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National Exposure Standards:
SWA – Potassium hydroxide 2mg/m^3 TWA & Peak Limitation

Biological Limit Values: No data available.

Engineering Controls:
Not required with normal use. If mists are likely to be generated maintain atmospheric concentrations well below exposure standards with 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 liquid
Odour:	Nil
pH:	14
Boiling Point (^{0}C) :	100
Freezing/melting Point:	Not applicable
Vapour Pressure (mm of Hg @ 25^{0}C) :	25
Vapour Density:	Not applicable
Specific Gravity :	1.2
Flash Point (^{0}C) :	Not flammable
Flammability Limits (%) :	Not flammable
Solubility in Water (g/L) :	Soluble

10. STABILITY AND REACTIVITY

Chemical stability:
Stable.
Conditions to avoid:
Exposure to air. Absorbs carbon dioxide
Incompatible materials:
Acids, organic materials, peroxides, chlorinated solvents, aluminum, phosphorus, tin and zinc.
Hazardous decomposition products:
Refer to section 5 (Fire Fighting Measures).
Hazardous reactions:
Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Health Effects:
Swallowed : causes severe burns to tissue. Ingestion may cause vomiting, diarrhoea, collapse and possibly death For potassium hydroxide LD50 oral - rabbits 273mg/kg.
Eye : May cause severe burns and possible permanent damage. For potassium hydroxide 1mg rinse for 24 hrs produced moderate irritation of rabbit eyes.

.**Skin :** Causes severe burns with possible ulceration. 50mg of potassium hydroxide produced severe irritation of human skin after 24hrs.
Inhaled : May be irritating to respiratory tissue. Inhalation of mists may be fatal as a result of spasm, inflammation and oedema of the larynx and bronchi, chemical pneumonitis and pulmonary oedema.

Chronic Effects: No data available.

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. Observe all federal, state and local environmental regulations.

14. TRANSPORT INFORMATION

UN Number: 1814
UN Proper Shipping Name: POTASSIUM HYDROXIDE SOLUTION
Class and subsidiary risk(s): 8
Packing Group: 11
Hazchem Code: 2R
Special precautions for user : Nil

15. REGULATORY INFORMATION

Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP):
Schedule 6

16. OTHER INFORMATION

END of SDS