

## MATERIAL SAFETY DATA SHEET

### Ammonia ISA 10M NaOH (EC-ISA-AA1-BT)

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#### EUTECH INSTRUMENTS PTE LTD.

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#### GENERAL INFORMATION

PRODUCT NAME:	Ammonia ISA 10M NaOH
MANUFACTURE'S NAME:	Eutech Instrument PTE LTD
DISTRIBUTED BY:	Eutech Instrument PTE LTD
CHEMICAL NAME:	Sodium Hydroxide in Water
CHEMICAL FAMILY:	Salt Solution

#### INGREDIENTS

CAS NO:	1310-73-2
% of NaOH:	40.0%
% of water:	60.0%
OSHA/PEL:	2 (mg/m3)
ACGIH/TLV:	2 (mg/m3)
LD50(mg/kg) oral-rat of NaOH	NA

#### PHYSICAL DATA

Appearance & Odor:	Liquid, Colorless & Odorless
Physical State:	Liquid
Boiling Point:	100°C
Vapour Pressure (mmHg):	The Highest known value is 2.3 kPa (@20°C) (Water)
Freezing Point:	NA
Vapour Density:	The highest known value is 0.62 (Air=1) (water)
Specific Gravity:	Weight average: 1.27 (Water=1)
Solubility:	Easily soluble in cold water, hot water
pH:	Basic

#### FIRE AND EXPLOSION HAZARD DATA

Flash Point:	Not Flammable
Auto ignition Temperature:	NA
Fire Extinguishing Media:	Any
Special Fire-fighting procedures:	NA
Explosion Hazards in Presence of Various Substances	Non-explosive in presence of open flames & sparks, of shocks.
Unusual Fire and Explosion Hazards:	Sodium Hydroxide reacts to form explosive products with Ammonia + Silver Nitrate. Benzene extract of allyl benzenesulfonate prepared from allyl alcohol, and benzene sulfonyl chloride in presence of aqueous sodium hydroxide, under vacuum distillation, residue darkened and exploded.

#### HEALTH HAZARD DATA

Effects of Overexposure:	Dizziness, nausea, weakness if taken internally.
Emergency and First Aid :	Wash off affected area with water or induce vomiting if ingested.
Eyes & Skin	Wash off with large amounts of water for 15 minutes.
Ingestion/Inhalation:	Internal- induce vomiting. Consult physician.

#### REACTIVITY DATA

Stability:	Stable
Condition to avoid:	Storing near heat or incompatible chemicals
Incompatibles:	Highly reactive metals, oxidizing agents, reducing agents, acids, alkalis
Corrosively:	Extremely corrosive in presence of aluminum. Slightly corrosive in presence of glass, of copper, of stainless steel (304), of stainless steel (316).

#### SPILL AND DISPOSAL PROCEDURES

Steps to be taken :	Dilute with water, and cover with soda ash, mix and scoop into a beaker of water, neutralize with HCl and wash down drain with excess water.
Waste disposal procedure:	Add to a large container of water, stir in slight excess of soda ash. Let stand 24 hours. Neutralize with 6M HCl and wash down drain with excess water. Observe all federal, state, and local laws.
Ventilation:	Exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value

Respiratory protection:	Vapor respirator
Eye protection:	Safety goggles

#### STORAGE AND HANDLING PRECAUTIONS

Storage requirements:	Keep container tightly closed. Keep container In cool , well ventilated area.
Other precautions:	Keep locked up. Keep container dry. Do not breathe gas/fumes/vapor/spray. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, reducing agents, metals, acids, alkalis, moisture.