



## MATERIAL SAFETY DATA SHEET

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Issue Date:

### 1- Chemical Product Information and Company Identification.

**Product Name:** : Ammonia solution 7 N in Methanol.  
**Synonym:** : NA  
**Product code:** : BS14447.  
**CAS Number:** : NA  
**Company Name:** : Briti Scientific.  
**Company Address:** : Plot No:78/B/13, SY-79,Phase-VI, Jeedimetla,Hyderabad-500 055.  
Telangana, India.

### Section 2- Composition / Information on Ingredients.

**Proprietary:**

No components need to be disclosed according to the applicable regulations.

### Section 3- Hazards Identification.

**Classification**

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids: Category 2

Acute oral toxicity: Category 3

Acute dermal toxicity: Category 3

Acute Inhalation Toxicity – Vapors: Category 3

Skin Corrosion/Irritation: Category 1 B

Serious Eye Damage/Eye Irritation: Category 1

Specific target organ toxicity (single exposure): Category 1

Target Organs - Optic nerve, Central nervous system (CNS).

**Label Elements**

**Signal Word**

Danger

**Hazard Statements:**

Highly flammable liquid and vapor.

Causes severe skin burns and eye damage.

Causes damage to organs.

Toxic if swallowed, in contact with skin or if inhaled.





## **Precautionary Statements**

### **Prevention**

- Wash face, hands and any exposed skin thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Use only outdoors or in a well-ventilated area.
- Do not breathe dust/fume/gas/mist/vapors/spray.
- Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use explosion-proof electrical/ventilating/lighting equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Keep cool.
- Wear respiratory protection.

### **Response**

Immediately call a POISON CENTER or doctor/physician.

### **Inhalation**

- IF INHALED:** Remove victim to fresh air and keep at rest in a position comfortable for breathing
- Immediately call a POISON CENTER or doctor/physician.

### **Skin**

- Wash contaminated clothing before reuse.
- IF ON SKIN (or hair):** Take off immediately all contaminated clothing. Rinse skin with water/shower

### **Eyes**

- IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### **Ingestion**

- Rinse mouth.
- Do NOT induce vomiting.

### **Fire**

- In case of fire:** Use CO<sub>2</sub>, dry chemical, or foam for extinction.

### **Storage**

- Store locked up.
- Store in a well-ventilated place. Keep container tightly closed.



## Disposal

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

### **Hazards not otherwise classified (HNOC):**

Harmful to aquatic life with long lasting effects.

Corrosive to the respiratory tract.

### **Other hazards:**

Poison, may be fatal or cause blindness if swallowed. Vapor harmful. CANNOT BE MADE NON-POISONOUS.

**WARNING:** Reproductive Harm.

## **Section 4- First Aid Measures.**

**General Advice:** Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

**Eye Contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if symptoms occur.

**Skin Contact:** Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

**Ingestion:** Do NOT induce vomiting. Get medical attention.

**Most important symptoms and effects:** Causes burns by all exposure routes. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Product is acorrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

**Notes to Physician:** Treat symptomatically.

## **Section 5- Fire Fighting Measures.**

**Suitable Extinguishing Media:** CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam. Water mist may be used to cool closed containers.

**Unsuitable Extinguishing Media:** Water may be ineffective.

**Flash Point:** 14 °C / 57.2 °F.

**Method -** No information available.

**Autoignition Temperature:** No information available.

### **Explosion Limits**

Upper No data available

Lower No data available

**Sensitivity to Mechanical Impact:** No information available.

**Sensitivity to Static Discharge:** No information available.



### Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes. Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

**Hazardous Combustion Products:** Nitrogen oxides (NO<sub>x</sub>), Ammonia, Formaldehyde.

### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### NFPA

Health	Flammability	Instability	Physical hazards
3	3	1	N/A

## Section 6- Accidental Release Measures.

**Personal Precautions:** Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

**Environmental Precautions:** Do not flush into surface water or sanitary sewer system.

### Methods for Containment and Clean Up:

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

## Section 7- Handling and Storage.

**Handling:** Ensure adequate ventilation. Wear personal protective equipment/face protection. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation. If swallowed then seek immediate medical assistance. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Take precautionary measures against static discharges.

**Storage:** Keep away from heat, sparks and flame. Refrigerator/flammables. Corrosives area. Store under an inert atmosphere. Protect from moisture. Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials, Strong oxidizing agents, Acids, Acid chlorides, Acid anhydrides, Strong reducing agents, Water, Halogens.

## Section 8- Exposure Control/Personal Protection.

**Exposure Guidelines:** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Engineering Measures:** Use only under a chemical fume hood. Use explosion-proof electrical/ventilating/lighting equipment. Ensure that eyewash stations and safety showers are close to the work station location. Ensure adequate ventilation, especially in confined areas.





### Personal Protective Equipment

**Eye/face Protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection:** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

### Hygiene Measures:

Handle in accordance with good industrial hygiene and safety practice

## Section 9- Physical and Chemical Properties.

**Appearance:** Colorless to light yellow liquid.

**Odor:** No information available.

**Odor Threshold:** No information available.

**pH:** No information available.

**Melting Point/Range:** No information available.

**Boiling Point/Range:** No information available.

**Flash Point:** 14 °C / 57.2 °F.

**Evaporation Rate:** No information available.

**Flammability (solid,gas):** Not applicable.

### Flammability or explosive limits

Upper No information available.

Lower No information available.

**Vapor Pressure:** No information available.

**Density:** No information available.

**Solubility:** Soluble in water.

**Partition coefficient; n-octanol/water:** No data available.

**Autoignition Temperature:** No data available.

**Decomposition Temperature:** No data available.

**Viscosity:** No data available.

**Molecular formula:** No information available.

**Molecular Weight:** No information available.

## Section 10- Stability and Reactivity.

**Reactive Hazard:** None known, based on information available

**Stability:** Hygroscopic.

**Conditions to Avoid:** Incompatible products. Keep away from open flames, hot surfaces and sources of ignition



**Incompatible Materials:** Strong oxidizing agents, Acids, Acid chlorides, Acid anhydrides, Strong reducing agents, Water, Halogens.

**Hazardous Decomposition Products:** Nitrogen oxides (NO<sub>x</sub>), Ammonia, Formaldehyde.

**Hazardous Polymerization:** Hazardous polymerization does not occur.

**Hazardous Reactions:** None under normal processing.

## Section 11- Toxicological Information.

### Acute Toxicity

#### Product Information

Oral LD50 Category 3. ATE = 50 - 300 mg/kg.

Dermal LD50 Category 3. ATE = 200 - 1000 mg/kg. Vapor.

LC50 Based on ATE data, the classification criteria are not met. ATE > 20 mg/l. Category 3. ATE = 2 - 10 mg/l.

**Toxicologically Synergistic Products:** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation:** Causes burns by all exposure routes.

**Sensitization:** No information available.

**Mutagenic Effects:** No information available.

**Reproductive Effects:** No information available.

**Developmental Effects:** No information available.

**Teratogenicity:** No information available.

STOT - single exposure: Optic nerve Central nervous system (CNS).

STOT - repeated exposure None known

**Aspiration hazard:** No information available.

**Symptoms / effects, both acute and delayed:** Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

**Endocrine Disruptor Information:** No information available.

**Other Adverse Effects:** The toxicological properties have not been fully investigated.

## Section 12- Ecological Information.

**Ecotoxicity:** Very toxic to aquatic organisms.

**Persistence and Degradability:** Persistence is unlikely.

**Bioaccumulation/ Accumulation:** No information available.

**Mobility:** No information available.



### Section 13- Disposal Considerations.

**Waste Disposal Methods:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

### Section 14- Transport Information.

#### **DOT**

UN-No: UN3286  
Proper Shipping Name: Flammable liquid, toxic, corrosive, n.o.s.  
Technical Name: (METHANOL, AMMONIA).  
Hazard Class: 3  
Subsidiary Hazard Class: 6.1, 8  
Packing Group: I

#### **TDG**

UN-No: UN3286  
Proper Shipping Name: Flammable liquid, toxic, corrosive, n.o.s.  
Hazard Class: 3  
Subsidiary Hazard Class: 6.1, 8  
Packing Group: II

#### **IATA**

UN-No: UN3286  
Proper Shipping Name: FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.\*  
Hazard Class: 3  
Subsidiary Hazard Class: 6.1, 8  
Packing Group: II

#### **IMDG/IMO**

UN-No: UN3286  
Proper Shipping Name: Flammable liquid, toxic, corrosive, n.o.s.  
Hazard Class: 3  
Subsidiary Hazard Class: 6.1, 8  
Packing Group: II

### Section 15- Regulatory Information.

#### **Legend:**

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed.

TSCA 12(b) - Notices of Export: Not applicable.

U.S. Federal Regulations

SARA 313: Not applicable.





SARA 311/312 Hazard Categories See section 2 for more information.

OSHA - Occupational Safety and

Health Administration: Not applicable.

California Proposition 65: This product contains the following Proposition 65 chemicals.

### Section 16- Other Information.

Briti Scientific provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.



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