

## MATERIAL SAFETY DATA SHEET

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Issue Date:

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

**Product Name:** : 1,2-Dibromoethane GC Reference standard, AnStan<sup>®</sup>.  
**Synonym:** : Ethylene Bromide.  
**Product code:** : BS14417.  
**CAS Number:** : 106-93-4.  
**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.

CAS No.	Chemical Name	Mol. Formula
106-93-4.	Ethylene Bromide.	C <sub>2</sub> H <sub>4</sub> Br <sub>2</sub> .

### Section 3- Hazards Identification.

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute oral toxicity Category 3

Acute dermal toxicity Category 3

Skin Corrosion/Irritation Category 2

Serious Eye Damage/Eye Irritation Category 2

Carcinogenicity Category 1B

Specific target organ toxicity (single exposure) Category 3

Target Organs - Respiratory system.

#### Label Elements

##### Signal Word

Danger

##### Hazard Statements

Causes skin irritation

Causes serious eye irritation

May cause respiratory irritation

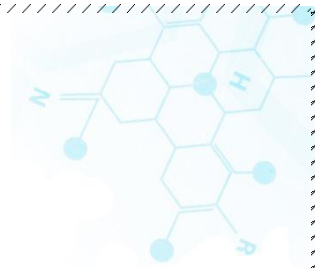
May cause cancer

Toxic if swallowed or in contact with skin



USA: #1004, Boston, Massachusetts, 02116, United States. India: Jeedimetla, Hyderabad-500 055, Telangana.

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## Precautionary Statements

### Prevention

- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Use personal protective equipment as required
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Wear eye/face protection
- Avoid breathing dust/fume/gas/mist/vapors/spray
- Use only outdoors or in a well-ventilated area

### Response

IF exposed or concerned: Get medical attention/advice

### Inhalation

**IF INHALED:** Remove victim to fresh air and keep at rest in a position comfortable for breathing

### Skin

- IF ON SKIN:** Wash with plenty of soap and water
- Call a POISON CENTER or doctor/physician if you feel unwell
- Remove/Take off immediately all contaminated clothing
- Wash contaminated clothing before reuse

**If skin irritation occurs:** Get medical advice/attention

### Eyes

**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

### Ingestion

**IF SWALLOWED:** Immediately call a POISON CENTER or doctor/physician

### Rinse mouth

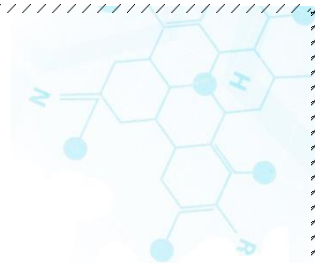
### Storage

- 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)
- Toxic to aquatic life with long lasting effects





## Section 4- First Aid Measures.

**General Advice:** If symptoms persist, call a physician

**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 soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.

**Inhalation:** Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial respiration. Immediate medical attention is required

**Ingestion:** Call a physician immediately. Clean mouth with water

**Most important symptoms and effects:** Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

**Notes to Physician:** Treat symptomatically

## Section 5- Fire Fighting Measures.

**Suitable Extinguishing Media:** Water spray. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Chemical foam

**Unsuitable Extinguishing Media:** No information available

**Flash Point** > 104 °C / > 219.2 °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**

Keep product and empty container away from heat and sources of ignition.

**Hazardous Combustion Products**

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Hydrogen halides

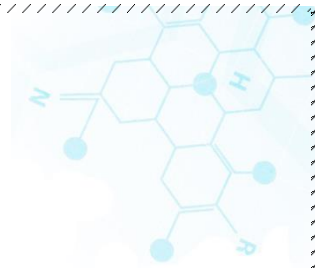
**Protective Equipment and Precautions for Firefighters**

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	0	0	N/A





## Section 6- Accidental Release Measures.

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

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

### **Methods for Containment and Clean Up:**

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

## Section 7- Handling and Storage.

**Handling:** Do not breathe mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Handle product only in closed system or provide appropriate exhaust ventilation.

**Storage:** Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Protect from direct sunlight. Do not store in metal containers. Incompatible Materials. Strong bases

## 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:** Ensure adequate ventilation, especially in confined areas. Ensure that eye wash stations and safety showers are close to the workstation location.

### **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.

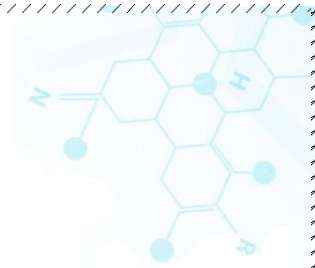
### **Hygiene Measures:**

Handle in accordance with good industrial hygiene and safety practice

## Section 9- Physical and Chemical Properties.

<b>Appearance</b>	Colorless to Light yellow clear liquid.
<b>Odor</b>	sweet
<b>Odor Threshold</b>	No information available
<b>pH</b>	No information available
<b>Melting Point/Range</b>	10 °C.
<b>Boiling Point/Range</b>	132 °C.





<b>Flash Point</b>	> 104 °C / > 219.2 °F
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid,gas)</b>	Not applicable
<b>Flammability or explosive limits</b>	
Upper	No data available
Lower	No data available
<b>Vapor Pressure</b>	No information available
<b>Density</b>	2.18 g/cm <sup>3</sup> .
<b>Solubility</b>	Soluble in alcohol.
<b>Partition coefficient; n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	> 340°C
<b>Decomposition Temperature</b>	No information available
<b>Viscosity</b>	No data available
<b>Molecular Formula</b>	C <sub>2</sub> H <sub>4</sub> Br <sub>2</sub> .
<b>Molecular Weight</b>	187.86 g/mol.

### Section 10- Stability and Reactivity.

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

**Stability:** Decomposes in contact with water. heat sensitive. Light sensitive. Decomposes on exposure to light

**Conditions to Avoid:** Exposure to light. Incompatible products. Exposure to moisture.

**Incompatible Materials:** Strong bases, Ammonia, Metals

**Hazardous Decomposition Products:** Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

**Hazardous Polymerization:** No information available

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

### Section 11- Toxicological Information.

**Information on toxicological effects**

**Acute toxicity:** Dermal: Toxic in contact with skin. Inhalation: Toxic if inhaled. Oral: Toxic if swallowed.

**Skin corrosion/irritation:** Causes skin irritation.

**Serious eye damage/irritation:** Causes serious eye irritation.

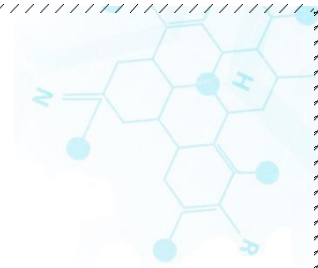
**Respiratory or skin sensitisation:** Not classified

**Germ cell mutagenicity:** Not classified

**Carcinogenicity:** May cause cancer.

**Reproductive toxicity:** Not classified





**STOT-single exposure:** May cause respiratory irritation.

**STOT-repeated exposure:** Not classified

**Aspiration hazard:** Not classified

**Potential adverse human health effects and symptoms** Toxic if swallowed. Toxic in contact with skin.

## Section 12- Ecological Information.

### **Toxicity**

Ecology - water : Toxic to aquatic life with long lasting effects.

### **Persistence and degradability**

May cause long-term adverse effects in the environment.

### **Bio accumulative potential**

No additional information available

### **Mobility in soil**

No additional information available

### **Results of PBT and vPvB assessment**

No additional information available

### **Other adverse effects**

No additional 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 UN1605

Proper Shipping Name ETHYLENE DIBROMIDE

Hazard Class 6.1

Packing Group I

### **TDG**

UN-No UN1605

Proper Shipping Name ETHYLENE DIBROMIDE

Hazard Class 6.1

Packing Group I

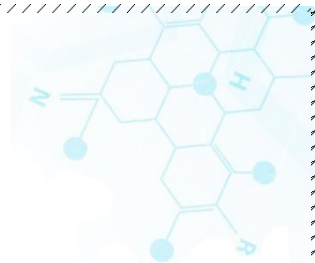
### **IATA FORBIDDEN FOR IATA TRANSPORT**

UN-No UN1605

Proper Shipping Name ETHYLENE DIBROMIDE, FORBIDDEN FOR IATA TRANSPORT

Hazard Class 6.1





Packing Group I  
**IMDG/IMO**  
UN-No UN1605  
Proper Shipping Name ETHYLENE DIBROMIDE  
Hazard Class 6.1  
Packing Group I

### 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

CWA (Clean Water Act) Not applicable

**Clean Air Act** Not applicable

**OSHA** - Occupational Safety and

Health Administration

Not applicable

**CERCLA** Not applicable

**California Proposition 65** This product does not contain any 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.

