

# Material Safety Data Sheet



**TETRAETHYL AMMONIUM BROMIDE FOR SYNTHESIS**

VERSION : 01  
DATE OF ISSUE :02-12-2016  
SUPERSEDES : Nil

Product Code : 53970

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## **1. Identification of the substance/mixture and of the company/undertaking**

### **1.1. Product identifier**

**Trade name** : TETRAETHYL AMMONIUM BROMIDE FOR SYNTHESIS

**Product code** : 53970

**Identification of the product** : TETRAETHYL AMMONIUM BROMIDE FOR SYNTHESIS

CAS No :71-91-0

### **1.2. Relevant identified uses of the substance or mixture and uses advised against**

Use : Industrial. For professional use only.

### **1.3. Details of the supplier of the safety data sheet**

**Company identification** : MOLYCHEM

Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai – 400 002 (INDIA) Tel: +91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442.

Email : [info@molychem.net](mailto:info@molychem.net)

Works: Plot No. B/9, Badlapur M.I.D.C.,OPP.Shobhavat Textile Co.,  
Kulgaon, Badlapur (E), Dist.-Thane-421 503.

## **2. Hazards identification -DSD**

### **2.1. Classification of the substance or mixture**

**Classification EC 67/548 or EC 1999/45**

**Classification** : Xi; R36/37/38

**Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)**

**Health hazards** : Specific Target Organ Toxicity - Single exposure - Respiratory tract irritation - Category 3 - Warning (CLP : STOT SE 3) H335

Eye irritation - Category 2A - Warning (CLP : Eye Irrit. 2) H319

Skin irritation - Category 2 - Warning (CLP : Skin Corr. 2) H315

### **2.2. Label elements**

**Labelling EC 67/548 or EC 1999/45**

**Symbol(s)** : Xn : Harmful



**R Phrase(s)** : R36/37/38 : Irritating to eyes, respiratory system and skin.

**S Phrase(s)** : S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37/39 : Wear suitable gloves and eye/face protection.

**Labelling Regulation EC 1272/2008 (CLP)**

**Hazard pictograms**

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**Signal words** : Warning

**Hazard statements** : H319 : Causes serious eye irritation.

H315 : Causes skin irritation.

H335 : May cause respiratory irritation.

### **Precautionary statements**

• **Prevention** : P280: Wear protective gloves, protective clothing, eye protection, face protection.

P271: Use only outdoors or in a well-ventilated area.

P261: Avoid breathing dust, fume, gas, mist, vapours, spray.

P264: Wash thoroughly after handling.

• **Response** : P302+P352: IF ON SKIN : Wash with plenty of soap and water.

P332+P313: If skin irritation occurs : Get medical advice.

P305+P351+P338: IF IN EYES : Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position comfortable for breathing.

P363: Wash contaminated clothing before reuse.

• **Storage** : P403+P233: Store in well-ventilated place. Keep container tightly closed.

P405: Store locked up.

• **Disposal considerations** : P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### **2.3. Other hazards**

**Other hazards** : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

## **3. Composition/information on ingredients**

**Substance / Preparation** : TETRAETHYL AMMONIUM BROMIDE FOR SYNTHESIS

CAS No :71-91-0

Substance.

Contains no other components or impurities which will influence the classification of the product.

## **4. First aid measures**

### **4.1. Description of first aid measures**

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**Inhalation** : Call a POISON CENTER or doctor if you feel unwell. Remove to fresh air and keep at rest in a position comfortable for breathing.

**Skin contact** : If skin irritation occurs : Get medical advice. Specific treatment (see on this label). Wash contaminated clothing before reuse. Wash with plenty of soap and water.

**Eye contact** : 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.

**Ingestion** : Obtain emergency medical attention. Do NOT induce vomiting. Rinse mouth.

## **4.2. Most important symptoms and effects, both acute and delayed**

**Symptoms relating to use** : Causes serious eye irritation.

Causes skin irritation. May cause respiratory irritation.

## **4.3. Indication of any immediate medical attention and special treatment needed**

**General information** : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

## **5. Fire-fighting measures**

### **5.1. Extinguishing media**

**Suitable extinguishing media** : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

**Unsuitable extinguishing media** : Do not use a heavy water stream.

**Surrounding fires** : Use water spray or fog for cooling exposed containers.

### **5.2. Special hazards arising from the substance or mixture**

**Hazardous combustion products** : Under fire conditions, hazardous fumes will be present.

### **5.3. Advice for fire-fighters**

**Protection against fire** : Do not enter fire area without proper protective equipment, including respiratory protection.

**Special procedures** : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

## **6. Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

**For emergency responders** : Equip cleanup crew with proper protection.  
Ventilate area.

**For non-emergency personnel** : Evacuate unnecessary personnel.

### **6.2. Environmental precautions**

**Environmental precautions** : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

### **6.3. Methods and material for containment and cleaning up**

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**Clean up methods :** On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

## **6.4. Reference to other sections**

See section 8. Exposure controls/personal protection

## **7. Handling and storage**

### **7.1. Precautions for safe handling**

**Handling :** Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Wash thoroughly after handling.

**Technical protective measures :** Provide good ventilation in process area to prevent formation of vapour.

**Special precautions :** Avoid breathing dust, fume, gas, mist, vapours, spray.

### **7.2. Conditions for safe storage, including any incompatibilities**

**Storage :** Keep only in the original container in a cool, well ventilated place. Keep container tightly closed.

**Storage - away from :** Strong bases. Strong acids. Sources of ignition. Direct sunlight.

### **7.3. Specific end use(s)**

**Specific end use(s) :** None.

## **8. Exposure controls/personal protection**

### **8.1. Exposure controls**

**Personal protection :** Avoid all unnecessary exposure.

- **Respiratory protection :** Wear approved mask.
- **Hand protection :** Wear protective gloves.
- **Skin protection :** Wear suitable protective clothing.
- **Eye protection :** Chemical goggles or safety glasses.
- **Others :** When using, do not eat, drink or smoke.

### **8.2. Control parameters**

**Occupational Exposure Limits :** No data available.

## **9. Physical and chemical properties**

### **9.1. Information on basic physical and chemical properties**

**Physical state at 20 °C :** Solid.

**Odour threshold :** No data available.

**pH value :** Not applicable.

**Melting point [°C] :** 285 °C

**Decomposition point [°C] :** N/A

**Critical temperature [°C] :** N/A

**Auto-ignition temperature [°C] :** N/A

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**Flammability (solid, gas) :** N/A  
**Flash point [°C] :** N/A  
**Boiling point [°C] :** N/A  
**Initial boiling point [°C] :** N/A  
**Final boiling point [°C] :** N/A  
**Evaporation rate :** N/A  
**Vapour pressure [20°C] :** N/A  
**Vapour pressure mm/Hg :** N/A  
**Vapour density :** 5,3  
**Density [g/cm<sup>3</sup>] :** 1,4  
**Relative density, gas (air=1) :** N/A  
**Relative density, liquid (water=1) :** N/A  
**Solubility in water [% weight] :** Soluble in water  
**Solubility in water :** N/A  
**Log Pow octanol / water at 20°C :** No data available.  
**Solubility :** 6.5 at 100 g/l  
**Viscosity at 40°C [mm<sup>2</sup>/s] :** N/A  
**9.2. Other information**  
**Explosive properties :** N/A  
**Explosion limits - upper [%] :** N/A  
**Explosion limits - lower [%] :** N/A  
**Oxidising properties :** No data available.

## 10. Stability and reactivity

### 10.1. Reactivity

**Reactivity :** Not established.

### 10.2. Chemical stability

**Chemical stability :** Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

**Hazardous reactions :** Not established.

### 10.4. Conditions to avoid

**Conditions to avoid :** Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

**Materials to avoid :** Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products :** Fumes. Carbon monoxide. Carbon dioxide.

## 11. Toxicological information

### 11.1. Information on toxicological effects

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## **Acute toxicity**

- **Inhalation** : Based on available data, the classification criteria are not met.
  - **Dermal** : Based on available data, the classification criteria are not met.
  - **Ingestion** : Based on available data, the classification criteria are not met.
- Corrosion** : Based on available data, the classification criteria are not met.
- Irritation** : Causes serious eye irritation. Causes skin irritation. May cause respiratory irritation.
- Sensitization** : Based on available data, the classification criteria are not met.
- Mutagenicity** : Based on available data, the classification criteria are not met.
- Carcinogenicity** : Based on available data, the classification criteria are not met.
- Toxic for reproduction** : Based on available data, the classification criteria are not met.
- STOT-single exposure** : Based on available data, the classification criteria are not met.
- STOT-repeated exposure** : Based on available data, the classification criteria are not met.
- Aspiration hazard** : Based on available data, the classification criteria are not met.

## **12. Ecological information**

### **12.1. Toxicity**

**Toxicity information** : Not established.

### **12.2. Persistence - degradability**

**Persistence - degradability** : Biodegradable.

### **12.3. Bioaccumulative potential**

**Bioaccumulative potential** : Not established.

### **12.4. Mobility in soil**

**Mobility in soil** : Not established.

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

**Results of PBT and vPvB assessment** : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

### **12.6. Other adverse effects**

**Environmental precautions** : Avoid release to the environment.

## **13. Disposal considerations**

### **13.1. Waste treatment methods**

**General** : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

## **14. Transport information**

### **14.1. Land transport (ADR-RID)**

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**General information** : Not regulated.

**14.2. Sea transport (IMDG) [English only]**

**General information** : Not regulated.

**14.3. Air transport (ICAO-IATA) [English only]**

**General information** : Not regulated.

## **15. Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**Safety, health and environmental** : Ensure all national/local regulations are observed.  
**regulations/legislation specific for the substance or mixture**

**REACH Restrictions - Annex XVII** : The components of this product are not subject to restrictions.

**REACH Authorisation - Annex XIV** : The components of this product are not subject to authorization.

**15.2. Chemical Safety Assessment**

**Chemical Safety Assessment** : It has not been carried out.

## **16. Other information**

**Abbreviations and acronyms** : PBT: persistent, bioaccumulative and toxic.

vPvB: very persistent and very bioaccumulative

**Sources of key data used** : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

**Further information** : None.

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**End of document**

**Prepared by: MOLYCHEM (INDIA)**

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