


<b>Material Safety Data Sheet</b>	
<b>TETRA BUTYL AMMONIUM BROMIDE FOR SYNTHESIS</b>	<b>VERSION : 01</b> <b>DATE OF ISSUE :02-12-2016</b> <b>SUPERSEDES : Nil</b>
<b>Product Code : 19316</b>	<b>Page 1 of 8</b>

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

### **1.1. Product identifier**

**Trade name :** TETRA BUTYL AMMONIUM BROMIDE FOR SYNTHESIS

**Product code :** 19316

**Identification of the product :** TETRA BUTYL AMMONIUM BROMIDE

**CAS No :** 1643-19-2

### **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

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

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

### **2.2. Label elements**

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

**Symbol(s) :** Xi : Irritant



**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.

S36 : Wear suitable protective clothing.


**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** : TETRA BUTYL AMMONIUM BROMIDE

CAS No :1643-19-2

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

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

**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. Rinse mouth. Do NOT induce vomiting.

#### **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**

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

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#### **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] :** 102 - 106 °C

**Decomposition point [°C] :** N/A

**Critical temperature [°C] :** N/A

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

**Flammability (solid, gas) :** N/A

**Flash point [°C] :** N/A

**Boiling point [°C] :** N/A

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**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 : N/A  
Density [g/cm<sup>3</sup>] : 1,15  
Relative density, gas (air=1) : N/A  
Relative density, liquid (water=1) : N/A  
Solubility in water [% weight] : 600 g/L @ 20°C  
Solubility in water : N/A  
Log Pow octanol / water at 20°C : No data available.  
Solubility : N/A  
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**


#### **Acute toxicity**

- **Inhalation** : Based on available data, the classification criteria are not met.
- **Dermal** : Based on available data, the classification criteria are not met.

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**• 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)**

**General information** : Not regulated.

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

**General information** : Not regulated.

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### **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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