

# Material Safety Data Sheet



**TETRA BUTYL AMMONIUM HYDROXIDE  
20% AQUEOUS SOLUTION**

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

**Product Code : 19330**

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

### **1.1. Product identifier**

**Trade name :** TETRABUTYL AMMONIUM HYDROXIDE 20% AQUEOUS SOLUTION

**Product code :** 19330

### **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 :** C; R35

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

**Health hazards :** Skin corrosion - Category 1A - Danger (CLP : Skin Corr. 1A) H314

### **2.2. Label elements**

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

**Symbol(s) :** C : Corrosive



**R Phrase(s) :** R35 : Causes severe burns.

**S Phrase(s) :** S24 : Avoid contact with skin.

S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28 : After contact with skin, wash immediately with

S35 : This material and its container must be disposed of in a safe way.

S36/37/39 : Wear suitable protective clothing, gloves and eye/face protection.

S45 : In case of accident or if you feel unwell, seek medical advice immediately ( show the label when possible).

S59 : Refer to manufacturer/supplier for information on recovery/recycling.

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

**Hazard pictograms**

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**Signal words :** Danger

**Hazard statements :** H314 : Causes severe skin burns and eye damage.

## **Precautionary statements**

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

P260: Do not breathe dust, fume, gas, mist, vapours, spray.

P264: Wash thoroughly after handling.

• **Response :** P301+P330+P331: IF SWALLOWED : Rinse mouth. Do NOT induce vomiting.

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.

P303+P361+P353: IF ON SKIN (or hair) : Remove immediately all contaminated clothing. Rinse skin with water/shower.

P363: Wash contaminated clothing before reuse.

• **Storage :** 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 :** Preparation.

**Hazardous component(s) :** This product is hazardous.

Substance name	Contents	CAS No
<b>TETRABUTYL AMMONIUM :</b>	> 15 < 25 %	2052-49-5
<b>HYDROXIDE (20% SOL.IN WATER)</b>		
<b>Water :</b>	> 75 < 99 %	7732-18-5

## **4. First aid measures**

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

**Inhalation :** Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor.

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**Skin contact :** Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Immediately call a POISON CENTER or doctor.

**Eye contact :** Immediately call a POISON CENTER or doctor. Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes.

**Ingestion :** Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.

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

**Symptoms relating to use :** Causes severe skin burns and eye damage.

## **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. Thermal decomposition generates : Corrosive vapours.

### **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 :** Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

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

See section 8. Exposure controls/personal protection

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## **7. Handling and storage**

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

**Handling :** Do not breathe dust, fume, gas, mist, vapours, spray. Avoid contact during pregnancy or while nursing. Wash thoroughly after handling.

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

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

**Storage :** Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.

**Storage regulation :** Comply with applicable regulations.

**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**

**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 face shield.
- **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 :** Liquid.

**Odour threshold :** No data available.

**pH value :** No data available.

**Melting point [°C] :** No data available.

**Decomposition point [°C] :** N/A

**Critical temperature [°C] :** No data available.

**Auto-ignition temperature [°C] :** No data available.

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

**Flash point [°C] :** No data available.

**Boiling point [°C] :** N/A

**Initial boiling point [°C] :** No data available.

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**Final boiling point [°C] :** No data available.  
**Evaporation rate :** N/A  
**Vapour pressure [20°C] :** No data available.  
**Vapour pressure mm/Hg :** N/A  
**Vapour density :** N/A  
**Density [g/cm<sup>3</sup>] :** 0,995  
**Relative density, gas (air=1) :** N/A  
**Relative density, liquid (water=1) :** N/A  
**Solubility in water [% weight] :** Miscible in water  
**Solubility in water :** No data available.  
**Log Pow octanol / water at 20°C :** No data available.  
**Solubility :** N/A

**Viscosity at 40°C [mm<sup>2</sup>/s] :** No data available.

## **9.2. Other information**

**Explosive properties :** N/A  
**Explosion limits - upper [%] :** No data available.  
**Explosion limits - lower [%] :** No data available.  
**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.  
**Thermal decomposition generates :** Corrosive vapours.

## **11. Toxicological information**

### **11.1. Information on toxicological effects**

**Toxicity information :** The product has been not fully tested. The calculated risk has been done under the requirements of the EU regulations.

### **Acute toxicity**

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• **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** : Causes severe skin burns and eye damage.  
**Irritation** : Based on available data, the classification criteria are not met.  
**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** : The product has been not fully tested. The calculated risk has been done under the requirements of the EU regulations.

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



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## **14. Transport information**

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

**Proper shipping name : CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.**

**UN N° : 3267**

**H.I. nr : 80**

**ADR - Class : 8**

**Labelling - Transport : 8 : Corrosive substance.**

**ADR - Classification code : C7**

**ADR - Group : II**

**ADR - Packing instructions : P001**

**ADR - Limited Quantity : 1 L**

**ADR - Tunnel code : E : Passage forbidden through tunnels of category E.**

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

**Proper shipping name : CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.**

**UN N° : 3267**

**IMO-IMDG - Class or division : 8 : Corrosive substance.**

**IMO-IMDG - Packing group : II**

**IMO- IMDG - Packing instructions : P001**

**IMO-IMDG - Limited quantities : 1 L**

**IMO-IMDG - Marine pollution : Yes**

**EMS-Nr : F-A S-B**

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

**Proper shipping name : CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.**

**UN N° : 3267**

**IATA - Class or division : 8 : Corrosive substance.**

**IATA - Packing group : II**

**IATA - Passenger and Cargo Aircraft : ALLOWED**

**- Passenger and Cargo - Packing : 851**

**instruction**

**- Passenger and Cargo - Maximum : 1 L**

**Quantity/Packing**

**IATA - Cargo only : ALLOWED**

**- Cargo only - Packing instruction : 855**

**- Cargo only - Maximum Quantity/ : 30 L**

**Packing**

**IATA - Limited Quantities : 0.5 L**

**ERG-Nr : 8L**

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## **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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