


<b>Material Safety Data Sheet</b>	
<b>TETRAMETHYL AMMONIUM HYDROXIDE 10% AQUEOUS SOL SOLUTION</b>	<b>VERSION : 01</b> <b>DATE OF ISSUE :02-12-2016</b> <b>SUPERSEDES : Nil</b>
<b>Product Code : 19349</b>	<b>Page 1 of 9</b>

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

### **1.1. Product identifier**

**Trade name :** TETRAMETHYL AMMONIUM HYDROXIDE 10% AQUEOUS SOL.

**Product code :** 19349

### **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; R34

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

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

### **2.2. Label elements**

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

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



**R Phrase(s) :** R34 : Causes 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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**Page 2 of 9**



**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
TETRAMETHYL AMMONIUM :	> 10 < 15 %	75-59-2
HYDROXIDE SOLUTION 10%		

## **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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<b>Product Code : 19349</b>	<b>Page 3 of 9</b>

**Skin contact :** Wash contaminated clothing before reuse. Specific treatment (see on this label). 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 :** Do NOT induce vomiting. Immediately call a POISON CENTER or doctor. Rinse mouth.

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

**Symptoms relating to use :** Repeated exposure to this material can result in absorption through skin causing significant health hazard. Swallowing a small quantity of this material will result in serious health hazard. 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**

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<b>Product Code : 19349</b>	<b>Page 4 of 9</b>

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

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

See section 8. Exposure controls/personal protection

### **7. Handling and storage**

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

**Handling :** Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Wash thoroughly after handling. Do not breathe dust, fume, gas, mist, vapours, spray.

**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

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<b>Product Code : 19349</b>	<b>Page 5 of 9</b>

**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] :** 110 °C  
**Initial boiling point [°C] :** No data available.  
**Final boiling point [°C] :** No data available.  
**Evaporation rate :** N/A  
**Vapour pressure [20°C] :** No data available.  
**Vapour pressure mm/Hg :** 17.5 mm Hg ( 20 °C)  
**Vapour density :** N/A  
**Density [g/cm<sup>3</sup>] :** 0,866  
**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.

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<b>Product Code : 19349</b>	<b>Page 6 of 9</b>

## **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**

- **Inhalation :** Based on available data, the classification criteria are not met.
- **Dermal :** Harmful in contact with skin.
- **Ingestion :** Harmful if swallowed.

**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



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<b>Product Code : 19349</b>	<b>Page 7 of 9</b>

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.

#### **14. Transport information**

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

**Proper shipping name :** TETRAMETHYLAMMONIUM HYDROXIDE

**UN N° :** 1835

**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 :** TETRAMETHYLAMMONIUM HYDROXIDE

**UN N° :** 1835

**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 :** No

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

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

**Proper shipping name :** TETRAMETHYLAMMONIUM HYDROXIDE

**UN N° :** 1835

**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**

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<b>Product Code : 19349</b>	<b>Page 8 of 9</b>

**IATA - Limited Quantities : 0.5 L**

**ERG-Nr : 8L**

### **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)**


**For questions contact: MOLYCHEM**

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<b>Product Code : 19349</b>	<b>Page 9 of 9</b>

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