# Material Safety Data Sheet TETRA BUTYL AMMONIUM HYDROXIDE 40% IN METHANOL Product Code: 19334 Page 1 of 9 VERSION: 01 DATE OF ISSUE: 02-12-2016 SUPERSEDES: Nil

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

### 1.1. Product identifier

Trade name: TETRABUTYL AMMONIUM HYDROXIDE 40% SOLUTION IN

**METHANOL** 

**Product code**: 19334

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

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

Not classified.

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

**Health hazards**: Specific Target Organ Toxicity - Single exposure - Category 1 -

Danger (CLP: STOT SE 1) H370

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

Acute toxicity, dermal - Category 3 - Danger (CLP: Acute Tox. 3) H311

Acute toxicity, Inhalation - Category 3 - Danger (CLP: Acute Tox. 3) H331

Acute toxicity, Oral - Category 3 - Danger (CLP: Acute Tox. 3) H301

### 2.2. Label elements

Labelling EC 67/548 or EC 1999/45

Not classified.

Labelling Regulation EC 1272/2008 (CLP)

Hazard pictograms



Signal words: Danger

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

H301: Toxic if swallowed.

H311: Toxic in contact with skin.

H331: Toxic if inhaled.

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H370: Causes damage to organ.

### **Precautionary statements**

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

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

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

P264: Wash thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

• **Response**: P307+P311: IF EXPOSED: Call a POISON CENTER or doctor.

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

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.

P361: Remove immediately all contaminated clothing.

- **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.

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.

Substance nameContentsCAS NoTetrabutylammonium hydroxide :> 25 < 50 %147741-30-8Methanol :> 50 < 75 %67-56-1

### 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. Specific treatment (see on this label). Immediately call a POISON CENTER or doctor. **Skin contact**: Specific treatment (see on this label). Immediately call a POISON CENTER or doctor. Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

**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. Rinse mouth. Specific treatment (see on this label). Immediately call a POISON CENTER or doctor.

# 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. Danger of serious damage to health by prolonged exposure through inhalation. Swallowing a small quantity of this material will result in serious health hazard. Causes damage to organ. 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). Specific treatment (see on this label). Call a POISON CENTER or doctor.

# 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 respirator 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. Avoid breathing dust, fume, gas, mist, vapours, spray.

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

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# **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. 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**: Use only outdoors or in a well-ventilated area. Avoid breathing dust, fume, gas, mist, vapours, spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Wash contaminated clothing before reuse. 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 tightly closed.

**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**: In case of insufficient ventilation, wear suitable respiratory equipment. Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.
- Hand protection : Wear protective gloves.
- **Skin protection**: Wear suitable protective clothing.
- Eve 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.

Occupational Exposure Limits: Methanol: OEL (UK)-LTEL [ppm]: 200

Methanol: OEL (UK)-STEL [ppm]: 250

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Methanol : HTP-värden - 8 H - [ppm] : 200
Methanol : HTP-värden - 15min - [ppm] : 250
Methanol : HTP-värden - 8 H - [mg/m³] : 270
Methanol : HTP-värden - 15min - [mg/m³] : 330
Methanol : NGV - [ppm] : 200
Methanol : NGV - [mg/m³] : 250
Methanol : KTV - [ppm] : 250
Methanol : KTV - [mg/m³] : 350
Methanol : VLA-ED [ppm] : 200
Methanol : VLA-ED [mg/m³] : 266
Methanol : VLA-EC [mg/m³] : 250
Methanol : VLA-EC [mg/m³] : 333

Methanol : ILV (EU) - 8 H - [mg/m<sup>3</sup>] : ( 260 Skin. ) Methanol : ILV (EU) - 8 H - [ppm] : ( 200 Skin. )

# 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.

 $\begin{array}{l} \textbf{Decomposition point [°C]}: N/A \\ \textbf{Critical temperature [°C]}: N/A \end{array}$ 

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

Flammability (solid, gas): N/A

Flash point [°C] : 4°C 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 : N/A Density [g/cm3] : N/A

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.

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**Solubility**: 11.6

Viscosity at 40°C [mm2/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.

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**

• Inhalation : Toxic if inhaled.

• Dermal: Toxic in contact with skin.

• **Ingestion** : Toxic 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**: Causes damage to organ.

Causes damage to organ.

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**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.

**Special precautions**: Hazardous waste due to toxicity.

## 14. Transport information

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

Proper shipping name: FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.

UN N°: 3286 H.I. nr: 368 ADR - Class: 3

**Labelling - Transport**: 3: Flammable liquid. 6.1: Toxic substances. 8: Corrosive

substance.

**ADR - Classification code**: FTC

**ADR - Group**: II

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**ADR - Packing instructions**: P001

**ADR - Limited Quantity**: 0

 $\label{eq:ADR-Tunnel code} \textbf{ADR-Tunnel code}: D/E: Bulk or tank carriage: Passage forbidden through tunnels of category D and E. Other carriage: Passage forbidden through tunnels of category E.$ 

14.2. Sea transport (IMDG) [English only]

**Proper shipping name**: FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.

**UN N°**: 3286

**IMO-IMDG - Class or division**: 3: Flammable liquid. (6.1: Toxic substances.) (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-E S-C

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

**Proper shipping name**: FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.

UN N°: 3286

**IATA - Class or division**: 3: Flammable liquid. (6.1: Toxic substances.) (8:

Corrosive substance.)

**IATA - Packing group** : II

IATA - Passenger and Cargo Aircraft : ALLOWED

- Passenger and Cargo - Packing: 352

instruction

- Passenger and Cargo - Maximum : 1 L

Quantity/Packing

IATA - Cargo only : ALLOWED

- Cargo only - Packing instruction: 363

- Cargo only - Maximum Quantity/: 5 L

**Packing** 

**IATA - Limited Quantites**: 0.5 L

### 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.

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**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

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