

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Issue date: 29-06-2022 Version: 1.0

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form Mixture

TETRAETHYL AMMONIUM HYDROXIDE 10% AQUEOUS SOLUTION EXTRA PURE Trade name

Product code 6219E

Chemical structure OH

-CH<sub>3</sub>

Synonyms Tetraethylazanium hydroxide, TEAH

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

#### 1.2.1. Relevant identified uses

Industrial/Professional use spec : For professional use only

Industrial

Use of the substance/mixture : Laboratory chemicals

Manufacture of substances

#### 1.2.2. Uses advised against

No additional information available

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

LOBA CHEMIE PVT.LTD.

107 Wode House Road, Jehangir Villa, Colaba

400005 Mumbai - INDIA

T +91 22 6663 6663 - F +91 22 6663 6699

info@lobachemie.com - www.lobachemie.com

# 1.4. Emergency telephone number

**Emergency number** : + 91 22 6663 6663 (9:00am - 6:00 pm)

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

# Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 1 H314

Full text of H-statements: see section 16

## Adverse physicochemical, human health and environmental effects

Causes severe skin burns and eye damage.

#### 2.2. Label elements

# Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)

GHS05

Signal word (CLP) : Danger

TETRAETHYL AMMONIUM HYDROXIDE Contains

Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage.

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Precautionary statements (CLP) : P280 - Wear protective clothing, eye protection, face protection, protective gloves.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water .

P310 - Immediately call a doctor.

#### 2.3. Other hazards

No additional information available

### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Not applicable

## 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
WATER DEIONIZED	CAS-No.: 7732-18-5	89.5 – 90.5	Not classified
TETRAETHYL AMMONIUM HYDROXIDE	CAS-No.: 77-98-5 EC-No.: 201-073-3	9.5 – 10.5	Skin Corr. 1, H314

Full text of H- and EUH-statements: see section 16

## **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a

physician immediately.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects after skin contact : Burns.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

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

Treat symptomatically.

# **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

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

# 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

## 5.3. Advice for firefighters

Protection during firefighting

: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

**Emergency procedures** 

: Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust, fume, gas, spray, mist, vapours.

6.1.2. For emergency responders

Protective equipment

: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

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

Methods for cleaning up

: Take up liquid spill into absorbent material.

Other information

: Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

# **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

Precautions for safe handling

: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe dust, gas, fume, mist, spray, vapours. Wear personal protective equipment.

Hygiene measures

: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

## 7.3. Specific end use(s)

No additional information available

## **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

## 8.1.1. National occupational exposure and biological limit values

No additional information available

# 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

## 8.1.4. DNEL and PNEC

No additional information available

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

#### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

## 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### 8.2.2. Personal protection equipment

## Personal protective equipment symbol(s):







## 8.2.2.1. Eye and face protection

### Eye protection:

Safety glasses

## 8.2.2.2. Skin protection

#### Hand protection:

Protective gloves

#### 8.2.2.3. Respiratory protection

#### Respiratory protection:

Wear appropriate mask

#### 8.2.2.4. Thermal hazards

No additional information available

## 8.2.3. Environmental exposure controls

### **Environmental exposure controls:**

Avoid release to the environment.

# **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Clear liquid.
Colour : Colourless.
Odour : ammonia like.
Odour threshold : No data available

pH : ≈ 13

Relative evaporation rate (butylacetate=1) : No data available

Melting point : Not applicable

Freezing point : No data available

Boiling point : ≈ 102 °C

Flash point : No data available

Auto-ignition temperature : No data available Decomposition temperature : No data available Flammability (solid, gas) : Not applicable

Vapour pressure : 0.00001 hPa (estimated)
Relative vapour density at 20 °C : No data available
Relative density : No data available
Density : ≈ 1.01 g/cm³ at 20°C
Solubility : Water: Miscible
Partition coefficient n-octanol/water (Log Pow) : No data available

Viscosity, kinematic : No data available

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

#### 9.2. Other information

No additional information available

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

## 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

## 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

#### 10.5. Incompatible materials

No additional information available

## 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Skin corrosion/irritation : Causes severe skin burns.

pH: ≈ 13

Serious eye damage/irritation : Assumed to cause serious eye damage

pH: ≈ 13

Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified STOT-single exposure : Not classified STOT-repeated exposure : Not classified Aspiration hazard : Not classified

# **SECTION 12: Ecological information**

## 12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

Hazardous to the aquatic environment, short-term : Not classified

(acute)

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Hazardous to the aquatic environment, long-term

/ L · · ·

(chronic)

: Not classified

### 12.2. Persistence and degradability

No additional information available

## 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

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

No additional information available

#### 12.6. Other adverse effects

No additional information available

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

# **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / ADN / RID

## 14.1. UN number

 UN-No. (ADR)
 : UN 3267

 UN-No. (IMDG)
 : UN 3267

 UN-No. (IATA)
 : UN 3267

 UN-No. (ADN)
 : UN 3267

 UN-No. (RID)
 : UN 3267

# 14.2. UN proper shipping name

Proper Shipping Name (ADR) : CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. Proper Shipping Name (IMDG) : CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.

Proper Shipping Name (IATA) : Corrosive liquid, basic, organic, n.o.s.

Proper Shipping Name (ADN) : CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. Proper Shipping Name (RID) : CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.

Transport document description (ADR) : UN 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Tetraethyl ammonium

hydroxide 10% Aqueous Solution), 8, II, (E)

Transport document description (IMDG) : UN 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Tetraethyl ammonium

hydroxide 10% Aqueous Solution), 8, II

Transport document description (IATA) : UN 3267 Corrosive liquid, basic, organic, n.o.s. (Tetraethyl ammonium hydroxide 10%

Aqueous Solution), 8, II

Transport document description (ADN) : UN 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Tetraethyl ammonium

hydroxide 10% Aqueous Solution), 8, II

Transport document description (RID) : UN 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Tetraethyl ammonium

hydroxide 10% Aqueous Solution), 8, II

## 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR) : 8

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Danger labels (ADR) : 8



#### **IMDG**

Transport hazard class(es) (IMDG) : 8
Danger labels (IMDG) : 8



#### IATA

Transport hazard class(es) (IATA) : 8
Danger labels (IATA) : 8



#### ADN

Transport hazard class(es) (ADN) : 8
Danger labels (ADN) : 8



## RID

Transport hazard class(es) (RID) : 8
Danger labels (RID) : 8



# 14.4. Packing group

Packing group (ADR) : II
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

# 14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

# 14.6. Special precautions for user

#### **Overland transport**

Classification code (ADR) : C7
Special provisions (ADR) : 274
Limited quantities (ADR) : 11
Excepted quantities (ADR) : E2
Packing instructions (ADR) : P001, IBC02
Mixed packing provisions (ADR) : MP15
Portable tank and bulk container instructions (ADR) : T11
Portable tank and bulk container special provisions : TP2, TP27

(ADR)

Tank code (ADR) : L4BN
Vehicle for tank carriage : AT
Transport category (ADR) : 2
Hazard identification number (Kemler No.) : 80

Orange plates

80 3267

Tunnel restriction code (ADR) : E EAC code : 2X

#### Transport by sea

Special provisions (IMDG) : 274 Limited quantities (IMDG) : 1L Excepted quantities (IMDG) : E2 Packing instructions (IMDG) : P001 IBC packing instructions (IMDG) : IBC02 Tank instructions (IMDG) : T11 Tank special provisions (IMDG) : TP2, TP27 EmS-No. (Fire) : F-A : S-B EmS-No. (Spillage) : B Stowage category (IMDG) : SW2 Stowage and handling (IMDG)

Segregation (IMDG) : SGG18, SG35

Properties and observations (IMDG) : Reacts violently with acids. Causes burns to skin, eyes and mucous membranes.

## Air transport

PCA Excepted quantities (IATA) : E2 PCA Limited quantities (IATA) : Y840 PCA limited quantity max net quantity (IATA) : 0.5L : 851 PCA packing instructions (IATA) PCA max net quantity (IATA) : 1L : 855 CAO packing instructions (IATA) CAO max net quantity (IATA) : 30L Special provisions (IATA) : A3, A803 ERG code (IATA) : 8L

#### Inland waterway transport

Classification code (ADN) : C7
Special provisions (ADN) : 274
Limited quantities (ADN) : 1 L
Excepted quantities (ADN) : E2
Equipment required (ADN) : PP, EP
Number of blue cones/lights (ADN) : 0

## Rail transport

Classification code (RID) : C7
Special provisions (RID) : 274

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Limited quantities (RID) : 1L Excepted quantities (RID) : E2

Packing instructions (RID) : P001, IBC02
Mixed packing provisions (RID) : MP15
Portable tank and bulk container instructions (RID) : T11
Portable tank and bulk container special provisions : TP2, TP27

(RID)

Tank codes for RID tanks (RID): L4BNTransport category (RID): 2Colis express (express parcels) (RID): CE6Hazard identification number (RID): 80

## 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## **SECTION 15: Regulatory information**

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

### 15.1.1. EU-Regulations

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	
3(b)	TETRAETHYL AMMONIUM HYDROXIDE 10% AQUEOUS SOLUTION EXTRA PURE ; TETRAETHYL AMMONIUM HYDROXIDE	

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

#### 15.1.2. National regulations

#### Germany

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG)
Observe restrictions according Act on the Protection of Young People in Employment

(JArbSchG)

Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed SZW-lijst van mutagene stoffen : None of the components are listed NIET-limitatieve lijst van voor de voortplanting : None of the components are listed

giftige stoffen – Borstvoeding

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Vruchtbaarheid

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen – Ontwikkeling

: None of the components are listed

: None of the components are listed

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

Switzerland

Storage class (LK) : LK 8 - Corrosive materials

# 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

# **SECTION 16: Other information**

Abbreviations and acre	Abbreviations and acronyms		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways		
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road		
ATE	Acute Toxicity Estimate		
BCF	Bioconcentration factor		
BLV	Biological limit value		
BOD	Biochemical oxygen demand (BOD)		
COD	Chemical oxygen demand (COD)		
DMEL	Derived Minimal Effect level		
DNEL	Derived-No Effect Level		
EC-No.	European Community number		
EC50	Median effective concentration		
EN	European Standard		
IARC	International Agency for Research on Cancer		
IATA	International Air Transport Association		
IMDG	International Maritime Dangerous Goods		
LC50	Median lethal concentration		
LD50	Median lethal dose		
LOAEL	Lowest Observed Adverse Effect Level		
NOAEC	No-Observed Adverse Effect Concentration		
NOAEL	No-Observed Adverse Effect Level		
NOEC	No-Observed Effect Concentration		
OECD	Organisation for Economic Co-operation and Development		
OEL	Occupational Exposure Limit		
PBT	Persistent Bioaccumulative Toxic		
PNEC	Predicted No-Effect Concentration		
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail		
SDS	Safety Data Sheet		
STP	Sewage treatment plant		
ThOD	Theoretical oxygen demand (ThOD)		
TLM	Median Tolerance Limit		
VOC	Volatile Organic Compounds		
CAS-No.	Chemical Abstract Service number		
N.O.S.	Not Otherwise Specified		
vPvB	Very Persistent and Very Bioaccumulative		
ED	Endocrine disrupting properties		

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Full text of H- and EUH-statements	
Skin Corr. 1	Skin corrosion/irritation, Category 1
H314	Causes severe skin burns and eye damage.

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.