

# TETRA BUTYL AMMONIUM HYDROXIDE 10% IN METHANOL EXTRA PURE MSDS



CAS No: MSDS

## MATERIAL SAFETY DATA SHEET (MSDS)

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

#### 1.1. Product identifier

Product form : Mixture  
:  
Product code : 6217F

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

##### 1.2.1. Relevant identified uses

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

SPAN LAB  
UNIT NO. 14, SKY INDUSTRIAL ESTATE, WALIV, VASAI (E)  
401208 Mumbai - INDIA  
PH: +91 9820509929  
[info@spanlab.in](mailto:info@spanlab.in) [www.spanlab.in](http://www.spanlab.in)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Directive 67/548/EEC or 1999/45/EC

T; R23/24/25  
T; R39/23/24/25  
Xi; R36/38

Full text of R-phrases: see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

# TETRA BUTYL AMMONIUM HYDROXIDE 10% IN METHANOL Extra Pure

## Safety Data Sheet

### 2.2. Label elements

#### Labelling according to Directive 67/548/EEC or 1999/45/EC

Hazard symbols :



T - Toxic

- R-phrases : R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed  
R36/38 - Irritating to eyes and skin  
R39/23/24/25 - Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed
- S-phrases : S4 - Keep away from living quarters  
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 plenty of ... (to be specified by the manufacturer)  
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  
S38 - In case of insufficient ventilation, wear suitable respiratory equipment  
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)  
S59 - Refer to manufacturer/supplier for information on recovery/recycling

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Methanol	(CAS No) 67-56-1 (EC no) 200-659-6 (EC index no) 603-001-00-X	75 - 99	F; R11 T; R23/24/25 T; R39/23/24/25	Flam. Liq. 2, H225 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Oral), H301 STOT SE 1, H370
TETRABUTYL AMMONIUM HYDROXIDE 40% IN WATER		1 - 5	C; R35	Skin Corr. 1A, H314

Full text of R- and H-phrases: see section 16

# TETRA BUTYL AMMONIUM HYDROXIDE 10% IN METHANOL Extra Pure

## Safety Data Sheet

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.
First-aid measures after skin contact	: Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth out with water. If you feel unwell, seek medical advice.

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

Symptoms/injuries	: Causes severe skin burns and eye damage. Causes damage to organs.
Symptoms/injuries after inhalation	: Toxic if inhaled.
Symptoms/injuries after skin contact	: Toxic in contact with skin.
Symptoms/injuries after ingestion	: Toxic if swallowed.

#### 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	: dry chemical powder, alcohol-resistant foam, carbon dioxide (CO <sub>2</sub> ).
Unsuitable extinguishing media	: Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

No additional information available

#### 5.3. Advice for firefighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment.
--------------------------------	--

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures	: Evacuate unnecessary personnel.
----------------------	-----------------------------------

##### 6.1.2. For emergency responders

Protective equipment	: Avoid breathing dust/fume/gas/mist/vapours/spray.
Emergency procedures	: Stop release.

#### 6.2. Environmental precautions

Avoid release to the environment.

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

Methods for cleaning up	: Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.
-------------------------	--

#### 6.4. Reference to other sections

No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling	: Do not breathe dust/fume/gas/mist/vapours/spray.
-------------------------------	--

# TETRA BUTYL AMMONIUM HYDROXIDE 10% IN METHANOL Extra Pure

## Safety Data Sheet

Hygiene measures : Do not eat, drink or smoke when using this product. Wash ... thoroughly after handling.

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

Storage conditions : Store in original container. Keep container tightly closed. Store in a dry place. Protect from moisture.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

Hand protection : protective gloves  
Eye protection : Chemical goggles or safety glasses  
Skin and body protection : Wear suitable protective clothing  
Respiratory protection : Wear respiratory protection

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid  
Colour : Clear Colorless to light yellow.  
Odour : characteristic.  
Odour threshold : No data available  
pH : No data available  
Relative evaporation rate (butylacetate=1) : No data available  
Melting point : -98 °C  
Freezing point : No data available  
Boiling point : 64 °C  
Flash point : 11 °C  
Auto-ignition temperature : 464 °C  
Decomposition temperature : No data available  
Flammability (solid, gas) : Flammable  
Vapour pressure : 13 kPa (at 20°C)  
Relative vapour density at 20 °C : 1.1

# TETRA BUTYL AMMONIUM HYDROXIDE 10% IN METHANOL Extra Pure

## Safety Data Sheet

Relative density	: No data available
Density	: 0.82 g/cm <sup>3</sup>
Solubility	: Water: Soluble in water
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 0.055 - 0.44 vol %

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Direct sunlight. Overheating. Open flame. Heat. Sparks.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity	: Toxic by inhalation, in contact with skin and if swallowed. Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
Irritation	: Irritating to eyes and skin.
Corrosivity	: Not classified
Sensitisation	: Not classified
Repeated dose toxicity	: Not classified
Carcinogenicity	: Not classified
Mutagenicity	: Not classified
Toxicity for reproduction	: Not classified

# TETRA BUTYL AMMONIUM HYDROXIDE 10% IN METHANOL Extra Pure

## Safety Data Sheet

Potential adverse human health effects and symptoms : Toxic if swallowed. Toxic in contact with skin.

### SECTION 12: Ecological information

#### 12.1. Toxicity

No additional information available

#### 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

Product/Packaging disposal recommendations : Dispose of contents/container to ...  
Ecology - waste materials : Hazardous waste due to toxicity.

### SECTION 14: Transport information

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

#### 14.1. UN number

UN-No. (ADR) : 3286  
UN-No. (IMDG) : 3286  
UN-No.(IATA) : 3286  
UN-No.(ADN) : 3286  
UN-No. (RID) : 3286

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.  
Proper Shipping Name (IMDG) : FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.  
Proper Shipping Name (IATA) : FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.  
Proper Shipping Name (ADN) : FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.  
Proper Shipping Name (RID) : FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.  
Transport document description (ADR) : UN 3286 FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S., 3 (6.1+8), II, (D/E)  
Transport document description (IMDG) : UN 3286 FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S., 3 (6.1+8), II

# TETRA BUTYL AMMONIUM HYDROXIDE 10% IN METHANOL Extra Pure

## Safety Data Sheet

Transport document description (IATA) : UN 3286 FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S., 3 (6.1+8), II  
Transport document description (ADN) : UN 3286 FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S., 3 (6.1+8), II  
Transport document description (RID) : UN 3286 FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S., 3 (6.1+8), II

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR) : 3 (6.1, 8)

Danger labels (ADR) : 3, 6.1, 8



#### IMDG

Transport hazard class(es) (IMDG) : 3 (6.1, 8)

Danger labels (IMDG) : 3, 6.1, 8



#### IATA

Transport hazard class(es) (IATA) : 3 (6.1, 8)

Hazard labels (IATA) : 3, 6.1, 8



#### ADN

Transport hazard class(es) (ADN) : 3 (6.1, 8)

Danger labels (ADN) : 3, 6.1, 8



#### RID

Transport hazard class(es) (RID) : 3 (6.1, 8)

Danger labels (RID) : 3, 6.1, 8



### 14.4. Packing group

Packing group (ADR) : II

# TETRA BUTYL AMMONIUM HYDROXIDE 10% IN METHANOL Extra Pure

## Safety Data Sheet

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

### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR)	: FTC
Special provision (ADR)	: 274
Limited quantities (ADR)	: 1L
Excepted quantities (ADR)	: E2
Packing instructions (ADR)	: P001, IBC02
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T11
Portable tank and bulk container special provisions (ADR)	: TP2, TP27
Tank code (ADR)	: L4BH
Tank special provisions (ADR)	: TU15
Vehicle for tank carriage	: FL
Transport category (ADR)	: 2
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13, CV28
Special provisions for carriage - Operation (ADR)	: S2, S22
Hazard identification number (Kemler No.)	: 368
Orange plates	:

368

3286

Tunnel restriction code (ADR)	: D/E
EAC code	: •3WE
APP code	: A(fl)

#### - Transport by sea

Special provision (IMDG)	: 274
Limited quantities (IMDG)	: 1 L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC99
Tank instructions (IMDG)	: T11
Tank special provisions (IMDG)	: TP2, TP13, TP27
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-C
Stowage category (IMDG)	: B
Stowage and handling (IMDG)	: SW2
Segregation (IMDG)	: SG5, SG8



# TETRA BUTYL AMMONIUM HYDROXIDE 10% IN METHANOL Extra Pure

## Safety Data Sheet

MFAG-No : 131

### - Air transport

PCA Excepted quantities (IATA) : E2  
PCA Limited quantities (IATA) : Y340  
PCA limited quantity max net quantity (IATA) : 0.5L  
PCA packing instructions (IATA) : 352  
PCA max net quantity (IATA) : 1L  
CAO packing instructions (IATA) : 363  
CAO max net quantity (IATA) : 5L  
ERG code (IATA) : 3CP

### - Inland waterway transport

Classification code (ADN) : FTC  
Special provisions (ADN) : 274, 802  
Limited quantities (ADN) : 1 L  
Excepted quantities (ADN) : E2  
Carriage permitted (ADN) : T  
Equipment required (ADN) : PP, EP, EX, TOX, A  
Ventilation (ADN) : VE01, VE02  
Number of blue cones/lights (ADN) : 2

### - Rail transport

Classification code (RID) : FTC  
Special provision (RID) : 274  
Limited quantities (RID) : 1L  
Excepted quantities (RID) : E2  
Packing instructions (RID) : P001, IBC02  
Mixed packing provisions (RID) : MP19  
Portable tank and bulk container instructions (RID) : T11  
Portable tank and bulk container special provisions (RID) : TP2, TP27  
Tank codes for RID tanks (RID) : L4BH  
Special provisions for RID tanks (RID) : TU15  
Transport category (RID) : 2  
Special provisions for carriage – Loading and unloading (RID) : CW13, CW28  
Colis express (express parcels) (RID) : CE7  
Hazard identification number (RID) : 368

#### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 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

Contains no substances with Annex XVII restrictions

Contains no REACH candidate substance

Contains no REACH Annex XIV substances.

# TETRA BUTYL AMMONIUM HYDROXIDE 10% IN METHANOL Extra Pure

## Safety Data Sheet

### 15.1.2. National regulations

#### Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 2, hazardous to water (Classification according to AwSV, Annex 1)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

#### Denmark

Class for fire hazard : Class I-1

Store unit : 1 liter

Classification remarks : F <Flam. Liq. 2>; Emergency management guidelines for the storage of flammable liquids must be followed

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product  
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Flam. Liq. 2	Flammable liquids, Category 2
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
STOT SE 1	Specific target organ toxicity — single exposure, Category 1
H225	Highly flammable liquid and vapour
H301	Toxic if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H331	Toxic if inhaled
H370	Causes damage to organs
R11	Highly flammable
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed
R35	Causes severe burns
R36/38	Irritating to eyes and skin
R39/23/24/25	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed
C	Corrosive

# TETRA BUTYL AMMONIUM HYDROXIDE 10% IN METHANOL Extra Pure

## Safety Data Sheet

F	Highly flammable
T	Toxic
Xi	Irritant

*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*