

# Safety data sheet

## TMAH

Version 1.0  
Effective date: 17-03-2022



### SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY / UNDERTAKING

#### 1.1 Product identifier.

Trade name: TMAH.

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

Product use: Professional use.

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

Company: Sunchem AB  
Box 69  
S-433 21 Partille  
Sverige  
Tel: +46 31 447310 [www.sunchem.se](http://www.sunchem.se)

Contact: [info@sunco.se](mailto:info@sunco.se)

#### 1.4 Emergency telephone number:

Use your national or local emergency number.  
United Kingdom: Contact The National Poisons Information Service (dial 111, 24 h service).

### SECTION 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture according to CLP No. 1272/2008/GB CLP.

Acute Tox. 3; H301, Acute Tox. 1; H310, Skin Corr. 1A; H314, Eye Dam. 1; H318, STOT SE 1; H370, STOT RE 1; H372, Aquatic Chronic 2; H411.

#### 2.2 Label elements CLP No. 1272/2008/GB CLP.

##### Hazard pictograms:



##### Signal word:

Danger

Contains: Tetramethylammonium hydroxide (TMAH).

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## Hazard statements:

H301 Toxic if swallowed.

H310 Fatal in contact with skin.

H314 Causes severe skin burns and eye damage.

H370 Causes damage to organs.

H372 Causes damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

## Precautionary statements:

General:

-

Prevention:

P262 Do not get in eyes, on skin, or on clothing.

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P301 + 310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P321 Specific treatment (see supplementary first aid instructions on the label).

P303 + 361 + 353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P361 + P364 Remove/Take off contaminated clothing and wash it before reuse.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container in accordance with national regulations.

## Additional labelling:

-

### 2.3 Other hazards.

This mixture does not meet the criteria for PBT or vPvB according to regulation 1907/2006 REACH, annex XIII.

This mixture does not contain substances with endocrine disrupting properties in accordance with the criteria laid down in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substance:** The product is a mixture.

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### 3.2 Mixture:

CAS/EC-no.	REACH-no.	Name	Content %	Classification CLP
75-59-2 / 200-882-9	01- 211997056234	Tetramethylammonium hydroxide (TMAH)	10-25	Acute Tox. 2; H300, Acute Tox. 1; H310, Skin Corr. 1A; H314, Eye Dam. 1; H318, STOT SE 1; H370, STOT RE 1; H372, Aquatic Chronic 2; H411.

See full text of H-phrases in section 16. Occupational limits, where applicable, are listed in section 8.

## SECTION 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**General information:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a Poison Centre or doctor.

**Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a Poison Centre or doctor.

**Skin contact:** Wash with plenty of soap and water. Contaminated clothing must be removed immediately. Call a Poison Centre or doctor. Wounds should be treated by a doctor.

**Eye contact:** Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Check for and remove any contact lenses. Get medical attention immediately.

**Ingestion:** Do NOT induce vomiting! Contact a doctor immediately. Rinse nose, mouth and throat with water.

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

Symptoms/effects: Causes severe skin and eye burns. Causes damage to organs.

Symptoms/effects after inhalation: Irritation (cough, shortness of breath, difficulty breathing).

Symptoms/effects after skin contact: Fatal in contact with skin.

Symptoms/effects after eye contact: Causes eye damage. Symptoms/effects after swallowing: Toxic if swallowed.

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

Treat symptomatically.

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## SECTION 5. FIRE FIGHTING MEASURES

**5.1 Extinguishing media:** Use an extinguishing agent suitable for the surrounding fire.

**Extinguishing media which must not be used for safety reasons:**

Water jets should not be used, since they can spread the fire.

**5.2 Special hazards arising from the substance or mixture:**

Not flammable.

Hazardous decomposition products: Very toxic gases, vapors, fumes. Highly corrosive gases, vapors, fumes.

**5.3 Advice for firefighters:**

Do not enter fire area without proper protective equipment, including respiratory protection (EN 137). Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures:**

See section 8 for recommendations on the use of personal protective equipment. Avoid contact with skin, eyes and clothes. Keep unprotected persons away. Ensure adequate ventilation, especially in confined areas. Do not breathe vapor or mist.

**6.2 Environmental precautions:**

Prevent undiluted entry to sewers and public waters. Notify authorities if large quantity liquid enters sewers or public waters.

**6.3 Methods and material for containment and cleaning up:**

Small spills: wipe up with absorbent material (e.g. cloth, fleece).

Large spills: Use sand, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in suitable closed container for disposal, according to local regulations. Never return spills to original containers for re-use. Then rinse the spillage site with plenty of water. Dispose of in accordance with section 13.

**6.4 Reference to other sections:**

See section 8 for personal protection.

See section 13 for disposal.

## SECTION 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling:**

See section 8 for recommendations on the use of personal protective equipment. Do not get in eyes, on skin, or on clothing. Avoid breathing vapor/mist. Provide adequate ventilation of the work area.

Hygiene measures:

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

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

Store away from **incompatible materials**, see section 10.

Storage temperature: 0 - 40°C.

### 7.3 Specific end use(s):

See section 1.2.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Occupational exposure limits EH40:

Contains no substances with occupational exposure limits.

DNEL / PNEC: -

### 8.2 Exposure controls.

#### Appropriate technical measures:

Airborne concentrations must be kept as low as possible. Use for example an exhaust system if the normal air flow in the work room is not sufficient.

#### General information:

Smoking, consumption of food or liquid, and storage of tobacco, food or liquid, are not allowed in the workroom. Always wash hands, forearms and face. Make sure that eyewash and emergency showers are clearly marked and available. Avoid contact with skin and eyes. Avoid breathing mist/vapors.

#### Personal protective equipment:

Only CE-marked personal protection equipment should be used.

#### Respiratory protection:

If risk of inhalation, use respiratory protection with filter E – EN 149.

#### Hand protection:

If there is a risk of skin contact, wear suitable protective gloves. Butyl rubber. Breakthrough time:  $\geq 30$  minutes. Thickness:  $> 0.4$  mm. STANDARD EN 374.

#### Eye protection:

Tightly fitting safety goggles. EN 166.

#### Body protection:

Impervious working clothes.

#### Measures to avoid environmental exposure:

No further information available.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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

Physical state:	Liquid
Colour:	Colorless
Odour:	Characteristic
Melting point/freezing point:	Not relevant/no data
Boiling point:	Not relevant/no data
Flammability:	No hazard
Lower and upper explosion limit:	No hazard
Flash point:	Not relevant/no data
Auto-ignition temperature:	Not relevant/no data
Decomposition temperature:	Not relevant/no data
pH:	Not relevant/no data
Dynamic viscosity:	Not relevant/no data
Solubility:	Soluble in water
Partition coefficient n-octanol/water:	Not relevant/no data
Vapour pressure:	Not relevant/no data
Density and/or relative density:	1.04 g/cm <sup>3</sup>
Relative vapour density:	Not relevant/no data
Particle characteristics:	Not relevant/no data

### 9.2 Other information:

Not relevant/no data.

## SECTION 10. STABILITY AND REACTIVITY

**10.1 Reactivity:** No dangerous reaction known under conditions of normal use and storage. Thermal decomposition produces: Corrosive vapors.

**10.2 Chemical stability:** Stable under normal storage conditions.

**10.3 Possibility of hazardous reactions:** None known if used and storage as recommended. Never pour water on or in the product, but pour the product into water.

**10.4 Conditions to avoid:** There are no known conditions to be avoided.

**10.5 Incompatible materials:** None known.

**10.6 Hazardous decomposition products:** Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition produces: Corrosive vapors.

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### SECTION 11. TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects.

<b>Acute toxicity:</b>	Toxic if swallowed. Fatal in contact with skin.
	Tetramethylammonium hydroxide (TMAH) – CAS 75-59-2: Oral – LD50 – Rat: 50 - 300 mg/kg Dermal – LD50 – Rabbit: 50 – 200 mg/kg
<b>Skin corrosion/irritation:</b>	Causes severe skin burns.
<b>Serious eye damage/irritation:</b>	Causes eye damage.
<b>Respiratory or skin sensitization:</b>	Not classified.
<b>Germ cell mutagenicity:</b>	Not classified.
<b>Carcinogenicity:</b>	Not classified.
<b>Reproductive toxicity:</b>	Not classified.
<b>Specific target organ toxicity - single exposure:</b>	Causes damage to organs.
<b>Specific target organ toxicity – repeated exposure:</b>	Causes damage to organs through prolonged or repeated exposure.
<b>Aspiration hazard:</b>	Not classified.

#### 11.2 Information on other hazards:

**Endocrine disrupting properties:**  
The product/substance has no endocrine disrupting properties.

**Additional information:** -

### SECTION 12. ECOLOGICAL INFORMATION

**12.1 Toxicity:** Toxic to aquatic life with long lasting effects.

**12.2 Persistence and degradability:**  
Tetramethylammonium hydroxide (TMAH) – CAS 75-59-2:  
May cause long-term adverse effects in the environment.

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## 12.3 Bioaccumulative potential:

No further information available.

## 12.4 Mobility in soil:

The product contains substances that are water-soluble and can be spread in the aquatic environment.

## 12.5 Result of PBT and vPvB assessment:

This mixture does not meet the criteria for PBT or vPvB according to regulation 1907/2006 REACH, annex XIII.

## 12.6 Endocrine disrupting properties:

The product/substance has no endocrine disrupting properties.

## 12.7 Other adverse effects:

None known.

## SECTION 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods:

Avoid release to the environment. This product is hazardous waste.

Dispose in a safe manner in accordance with local/national regulations. The coding of a waste stream is based on the application of the product by the consumer – end-user.

Option:

### EWC-Code:

16 05 07\* discarded inorganic chemicals consisting of or containing dangerous substances.

### Contaminated packing:

Properly cleaned container is disposed of according to packaging material, otherwise:

15 01 10\* packaging containing residues of or contaminated by dangerous substances.



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## SECTION 14. TRANSPORT INFORMATION

This product is classified as dangerous to transport.

	ADR/RID	IMDG/IMO
<b>14.1 UN number</b>	1835	1835
<b>14.2 UN proper shipping name</b>	TETRAMETHYLAMMONIUM HYDROXIDE SOLUTION	TETRAMETHYLAMMONIUM HYDROXIDE SOLUTION
<b>14.3 Transport hazard class(es)</b>	8	8
<b>14.4 Packing group</b>	II	II
<b>14.5 Environmental hazards - MP</b>	Yes F-A, S-B	Yes F-A, S-B
<b>Other informations</b>	LQ: 1 L. Tunnel: E	LQ: 1 L. Tunnel: E

### 14.6 Special precautions for user:

Not relevant.

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

Not relevant.

## SECTION 15. REGULATORY INFORMATION

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

Pressure Equipment (Amendment) Regulations 2011. Chemicals (Hazard Information and Packaging for Supply) Regulations 2009. Control of Substances Hazardous to Health Regulations 2002 (as amended). Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997. Reporting of Injuries, Personal Protective Equipment Regulations 2002. Personal Protective Equipment at Work Regulations 1992. Hazardous Waste (England and Wales) Regulations 2005(as amended). EC regulation 1907/2006 (REACH) Directive 2000/532/EC. EU No. 2020/878. CLP No. 1272/2008. GB CLP.

### Additional information:

People under the age of 18 must not be exposed to this product. Council Directive 94/33/EC.

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## 15.2 Chemical safety assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## SECTION 16. OTHER INFORMATION

### Full text of H-phrases as mentioned in section 2/3:

H301 Toxic if swallowed.

H310 Fatal in contact with skin.

H314 Causes severe skin burns and eye damage.

H370 Causes damage to organs.

H372 Causes damage to organs through prolonged or repeated exposure. H411

Toxic to aquatic life with long lasting effects.

### Additional information:

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.

### Validated by:

[www.chemgroup.se](http://www.chemgroup.se)

