

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

### 1.1. Product identifier

|                                  |                                                              |
|----------------------------------|--------------------------------------------------------------|
| <b>Product Description:</b>      | <b><u>Tetramethylammonium hydroxide pentahydrate</u></b>     |
| <b>Cat No. :</b>                 | <b>207520000; 207520050; 207520250; 207521000; 207525000</b> |
| <b>Synonyms</b>                  | N,N,N-Trimethylmethanaminium hydroxide pentahydrate.         |
| <b>CAS No</b>                    | 10424-65-4                                                   |
| <b>Molecular Formula</b>         | C4 H13 N O . 5 H2 O                                          |
| <b>REACH registration number</b> | 01-2119970562-34 (for the anhydrous form)                    |

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

|                                       |                                                                                             |
|---------------------------------------|---------------------------------------------------------------------------------------------|
| <b>Recommended Use</b>                | Laboratory chemicals.                                                                       |
| <b>Sector of use</b>                  | SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites    |
| <b>Product category</b>               | PC21 - Laboratory chemicals                                                                 |
| <b>Process categories</b>             | PROC15 - Use as a laboratory reagent                                                        |
| <b>Environmental release category</b> | ERC6a - Industrial use resulting in manufacture of another substance (use of intermediates) |
| <b>Uses advised against</b>           | No Information available                                                                    |

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

#### Company

**UK entity/business name**  
Fisher Scientific UK  
Bishop Meadow Road,  
Loughborough, Leicestershire LE11 5RG, United Kingdom

**EU entity/business name**  
Thermo Fisher Scientific  
Janssen Pharmaceuticaaan 3a, 2440 Geel, Belgium

**E-mail address** begel.sdsdesk@thermofisher.com

### 1.4. Emergency telephone number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

**GHS Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567**

#### Physical hazards

Based on available data, the classification criteria are not met

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## Health hazards

|                                                      |                     |
|------------------------------------------------------|---------------------|
| Acute oral toxicity                                  | Category 2 (H300)   |
| Acute dermal toxicity                                | Category 1 (H310)   |
| Skin Corrosion/Irritation                            | Category 1 (H314) B |
| Serious Eye Damage/Eye Irritation                    | Category 1 (H318)   |
| Specific target organ toxicity - (single exposure)   | Category 1 (H370)   |
| Specific target organ toxicity - (repeated exposure) | Category 1 (H372)   |

## Environmental hazards

|                          |                   |
|--------------------------|-------------------|
| Chronic aquatic toxicity | Category 2 (H411) |
|--------------------------|-------------------|

Full text of Hazard Statements: see section 16

## 2.2. Label elements



Signal Word

Danger

## Hazard Statements

- 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
- H300 + H310 - Fatal if swallowed or in contact with skin

## Precautionary Statements

- P310 - Immediately call a POISON CENTER or doctor/physician
- P361 + P364 - Take off immediately all contaminated clothing and wash it before reuse
- P280 - Wear protective gloves/protective clothing/eye protection/face protection
- P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
- P303 + P361 + P353 - 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

## 2.3. Other hazards

This product does not contain any known or suspected endocrine disruptors

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

| Component | CAS No | EC No | Weight % | GHS Classification - According to GB-CLP Regulations UK SI 2019/720 and |
|-----------|--------|-------|----------|-------------------------------------------------------------------------|
|-----------|--------|-------|----------|-------------------------------------------------------------------------|

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|                                                          |            |                   |     | UK SI 2020/1567                                                                                                                                             |
|----------------------------------------------------------|------------|-------------------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Methanaminium, N,N,N-trimethyl-, hydroxide, pentahydrate | 10424-65-4 |                   | >95 | Acute Tox. 2 (H300)<br>Acute Tox. 1 (H310)<br>Skin Corr. 1B (H314)<br>Eye Dam. 1 (H318)<br>STOT SE 1 (H370)<br>STOT RE 1 (H372)<br>Aquatic Chronic 2 (H411) |
| Tetramethylammonium hydroxide                            | 75-59-2    | EEC No. 200-882-9 | -   | Acute Tox. 2 (H300)<br>Acute Tox. 1 (H310)<br>Skin Corr. 1B (H314)<br>Eye Dam. 1 (H318)<br>STOT SE 1 (H370)<br>STOT RE 1 (H372)<br>Aquatic Chronic 2 (H411) |

|                           |                                           |
|---------------------------|-------------------------------------------|
| REACH registration number | 01-2119970562-34 (for the anhydrous form) |
|---------------------------|-------------------------------------------|

Full text of Hazard Statements: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

|                                    |                                                                                                                                                                                                                                                                                                                                |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General Advice                     | Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.                                                                                                                                                                                                                              |
| Eye Contact                        | In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.                                                                                                                                     |
| Skin Contact                       | Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.                                                                                                                                                                                                                    |
| Ingestion                          | Do NOT induce vomiting. Call a physician or poison control center immediately.                                                                                                                                                                                                                                                 |
| Inhalation                         | Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. |
| Self-Protection of the First Aider | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.                                                                                                                                                                               |

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

Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

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

|                    |                        |
|--------------------|------------------------|
| Notes to Physician | Treat symptomatically. |
|--------------------|------------------------|

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

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## Suitable Extinguishing Media

CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam.

## Extinguishing media which must not be used for safety reasons

No information available.

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

The product causes burns of eyes, skin and mucous membranes.

## Hazardous Combustion Products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Nitrogen oxides (NO<sub>x</sub>).

## 5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Use personal protective equipment as required. Evacuate personnel to safe areas. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid dust formation.

### 6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

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

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not ingest. If swallowed then seek immediate medical assistance. Do not breathe (dust, vapor, mist, gas). Avoid dust formation.

## Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

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

Keep containers tightly closed in a dry, cool and well-ventilated place. Store under an inert atmosphere. Corrosives area. Air sensitive.

Technical Rules for Hazardous Substances (TRGS) 510  
Storage Class (LGK) (Germany)

Class 6.1A

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## 7.3. Specific end use(s)

Use in laboratories

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

#### Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

#### Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

#### Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

See table for values

| Component                                      | Acute effects local (Dermal) | Acute effects systemic (Dermal) | Chronic effects local (Dermal) | Chronic effects systemic (Dermal) |
|------------------------------------------------|------------------------------|---------------------------------|--------------------------------|-----------------------------------|
| Tetramethylammonium hydroxide<br>75-59-2 ( - ) |                              |                                 | DNEL = 6.25µg/cm <sup>2</sup>  | DNEL = 0.14mg/kg bw/day           |

| Component                                      | Acute effects local (Inhalation) | Acute effects systemic (Inhalation) | Chronic effects local (Inhalation) | Chronic effects systemic (Inhalation) |
|------------------------------------------------|----------------------------------|-------------------------------------|------------------------------------|---------------------------------------|
| Tetramethylammonium hydroxide<br>75-59-2 ( - ) |                                  |                                     |                                    | DNEL = 0.49mg/m <sup>3</sup>          |

#### Predicted No Effect Concentration (PNEC)

See values below.

| Component                                      | Fresh water    | Fresh water sediment       | Water Intermittent | Microorganisms in sewage treatment | Soil (Agriculture)      |
|------------------------------------------------|----------------|----------------------------|--------------------|------------------------------------|-------------------------|
| Tetramethylammonium hydroxide<br>75-59-2 ( - ) | PNEC = 0.5µg/L | PNEC = 30µg/kg sediment dw | PNEC = 30µg/L      | PNEC = 5mg/L                       | PNEC = 5.7µg/kg soil dw |

| Component                                      | Marine water    | Marine water sediment     | Marine water intermittent | Food chain | Air |
|------------------------------------------------|-----------------|---------------------------|---------------------------|------------|-----|
| Tetramethylammonium hydroxide<br>75-59-2 ( - ) | PNEC = 0.05µg/L | PNEC = 3µg/kg sediment dw |                           |            |     |

### 8.2. Exposure controls

#### Engineering Measures

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or

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equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

## Personal protective equipment

### Eye Protection

Goggles (European standard - EN 166)

### Hand Protection

Protective gloves

| Glove material | Breakthrough time | Glove thickness | EU standard | Glove comments        |
|----------------|-------------------|-----------------|-------------|-----------------------|
| Natural rubber | See manufacturers | -               | EN 374      | (minimum requirement) |
| Nitrile rubber | recommendations   |                 |             |                       |
| Neoprene       |                   |                 |             |                       |
| PVC            |                   |                 |             |                       |

### Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.

(Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g.

sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

### Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly

### Large scale/emergency use

Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

**Recommended Filter type:** Particulates filter conforming to EN 143

### Small scale/Laboratory use

Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Recommended half mask:-** Particle filtering: EN149:2001

When RPE is used a face piece Fit Test should be conducted

### Environmental exposure controls

Prevent product from entering drains. Do not allow material to contaminate ground water system.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

|                           |                               |                                          |
|---------------------------|-------------------------------|------------------------------------------|
| Physical State            | Solid                         |                                          |
| Appearance                | White                         |                                          |
| Odor                      | Ammonia-like                  |                                          |
| Odor Threshold            | No data available             |                                          |
| Melting Point/Range       | 62 - 71 °C / 143.6 - 159.8 °F |                                          |
| Softening Point           | No data available             |                                          |
| Boiling Point/Range       | No information available      |                                          |
| Flammability (liquid)     | Not applicable                | Solid                                    |
| Flammability (solid,gas)  | No information available      |                                          |
| Explosion Limits          | <b>Lower</b> 6.7 Vol%         |                                          |
|                           | <b>Upper</b> 36 Vol%          |                                          |
| Flash Point               | Not applicable                | <b>Method -</b> No information available |
| Autoignition Temperature  | 470 °C / 878 °F               |                                          |
| Decomposition Temperature | No data available             |                                          |

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|                                         |                          |       |
|-----------------------------------------|--------------------------|-------|
| pH                                      | No information available |       |
| Viscosity                               | Not applicable           | Solid |
| Water Solubility                        | Soluble                  |       |
| Solubility in other solvents            | No information available |       |
| Partition Coefficient (n-octanol/water) |                          |       |
| Component                               | log Pow                  |       |
| Tetramethylammonium hydroxide           | -1.4                     |       |
| Vapor Pressure                          | No information available |       |
| Density / Specific Gravity              | No data available        |       |
| Bulk Density                            | No data available        |       |
| Vapor Density                           | Not applicable           | Solid |
| Particle characteristics                | No data available        |       |

## 9.2. Other information

|                   |                        |
|-------------------|------------------------|
| Molecular Formula | C4 H13 N O . 5 H2 O    |
| Molecular Weight  | 181.23                 |
| Evaporation Rate  | Not applicable - Solid |

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

None known, based on information available

### 10.2. Chemical stability

Hygroscopic. Air sensitive.

### 10.3. Possibility of hazardous reactions

|                          |                                          |
|--------------------------|------------------------------------------|
| Hazardous Polymerization | Hazardous polymerization does not occur. |
| Hazardous Reactions      | None under normal processing.            |

### 10.4. Conditions to avoid

Avoid dust formation. Incompatible products. Excess heat. Exposure to air. Exposure to moisture. Exposure to moist air or water.

### 10.5. Incompatible materials

Strong oxidizing agents. Strong acids.

### 10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>).

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Product Information

#### (a) acute toxicity;

|            |                                                                  |
|------------|------------------------------------------------------------------|
| Oral       | Category 2                                                       |
| Dermal     | Category 1                                                       |
| Inhalation | Based on available data, the classification criteria are not met |

| Component                     | LD50 Oral                  | LD50 Dermal            | LC50 Inhalation |
|-------------------------------|----------------------------|------------------------|-----------------|
| Tetramethylammonium hydroxide | LD50 34 - 50 mg/kg ( Rat ) | 25-50 mg/kg ( Rabbit ) | -               |

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|                                            |                                                                                                                                                                                                                                                             |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (b) skin corrosion/irritation;             | Category 1 B                                                                                                                                                                                                                                                |
| (c) serious eye damage/irritation;         | Category 1                                                                                                                                                                                                                                                  |
| (d) respiratory or skin sensitization;     |                                                                                                                                                                                                                                                             |
| Respiratory                                | No data available                                                                                                                                                                                                                                           |
| Skin                                       | No data available                                                                                                                                                                                                                                           |
| (e) germ cell mutagenicity;                | No data available                                                                                                                                                                                                                                           |
| (f) carcinogenicity;                       | No data available                                                                                                                                                                                                                                           |
|                                            | There are no known carcinogenic chemicals in this product                                                                                                                                                                                                   |
| (g) reproductive toxicity;                 | No data available                                                                                                                                                                                                                                           |
| (h) STOT-single exposure;                  | Category 1                                                                                                                                                                                                                                                  |
| Results / Target organs                    | Central nervous system (CNS).                                                                                                                                                                                                                               |
| (i) STOT-repeated exposure;                | Category 1                                                                                                                                                                                                                                                  |
| Route of exposure                          | Dermal                                                                                                                                                                                                                                                      |
| Target Organs                              | Liver, Thymus.                                                                                                                                                                                                                                              |
| (j) aspiration hazard;                     | Not applicable                                                                                                                                                                                                                                              |
|                                            | Solid                                                                                                                                                                                                                                                       |
| Other Adverse Effects                      | The toxicological properties have not been fully investigated.                                                                                                                                                                                              |
| Symptoms / effects, both acute and delayed | Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation. |

## 11.2. Information on other hazards

|                                 |                                                                                                                                     |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Endocrine Disrupting Properties | Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors. |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

#### Ecotoxicity effects

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

### 12.2. Persistence and degradability

#### Persistence

Expected to be biodegradable  
Soluble in water, Persistence is unlikely, based on information available.



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## Degradation in sewage treatment plant

Contains substances known to be hazardous to the environment or not degradable in waste water treatment plants.

## 12.3. Bioaccumulative potential

Bioaccumulation is unlikely

| Component                     | log Pow | Bioconcentration factor (BCF) |
|-------------------------------|---------|-------------------------------|
| Tetramethylammonium hydroxide | -1.4    | No data available             |

## 12.4. Mobility in soil

The product is water soluble, and may spread in water systems. Will likely be mobile in the environment due to its water solubility. Highly mobile in soils

## 12.5. Results of PBT and vPvB assessment

No data available for assessment.

## 12.6. Endocrine disrupting properties

### Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

## 12.7. Other adverse effects Persistent Organic Pollutant Ozone Depletion Potential

This product does not contain any known or suspected substance

This product does not contain any known or suspected substance

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

#### Waste from Residues/Unused Products

Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

#### Contaminated Packaging

Dispose of this container to hazardous or special waste collection point.

#### European Waste Catalogue (EWC)

According to the European Waste Catalog, Waste Codes are not product specific, but application specific.

#### Other Information

Do not flush to sewer. Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Large amounts will affect pH and harm aquatic organisms. Do not let this chemical enter the environment.

## SECTION 14: TRANSPORT INFORMATION

### IMDG/IMO

#### 14.1. UN number

UN3423

#### 14.2. UN proper shipping name

TETRAMETHYLAMMONIUM HYDROXIDE, SOLID

#### 14.3. Transport hazard class(es)

6.1

#### Subsidiary Hazard Class

8

#### 14.4. Packing group

I

### ADR

#### 14.1. UN number

UN3423

#### 14.2. UN proper shipping name

TETRAMETHYL-AMMONIUM HYDROXIDE, SOLID

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**14.3. Transport hazard class(es)** 6.1  
**Subsidiary Hazard Class** 8  
**14.4. Packing group** I

## IATA

**14.1. UN number** UN3423  
**14.2. UN proper shipping name** TETRAMETHYLAMMONIUM HYDROXIDE, SOLID  
**14.3. Transport hazard class(es)** 6.1  
**Subsidiary Hazard Class** 8  
**14.4. Packing group** I

**14.5. Environmental hazards** Dangerous for the environment  
 Product is a marine pollutant according to the criteria set by IMDG/IMO

**14.6. Special precautions for user** No special precautions required.

**14.7. Maritime transport in bulk according to IMO instruments** Not applicable, packaged goods

## SECTION 15: REGULATORY INFORMATION

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

#### International Inventories

China, X = listed, Australia, U.S.A. (TSCA), Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Australia (AICS), Korea (KECL), China (IECSC), Japan (ENCS), Philippines (PICCS), Taiwan (TCSI), Japan (ISHL), New Zealand (NZIoC), Japan (ISHL). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

| Component                                                | CAS No     | EINECS    | ELINCS | NLP | IECSC | TCSI | KECL     | ENCS | ISHL |
|----------------------------------------------------------|------------|-----------|--------|-----|-------|------|----------|------|------|
| Methanaminium, N,N,N-trimethyl-, hydroxide, pentahydrate | 10424-65-4 | -         | -      | -   | X     | X    | -        | X    | X    |
| Tetramethylammonium hydroxide                            | 75-59-2    | 200-882-9 | -      | -   | X     | X    | KE-33550 | X    | X    |

| Component                                                | CAS No     | TSCA | TSCA Inventory notification - Active-Inactive | DSL | NDSL | AICS | NZIoC | PICCS |
|----------------------------------------------------------|------------|------|-----------------------------------------------|-----|------|------|-------|-------|
| Methanaminium, N,N,N-trimethyl-, hydroxide, pentahydrate | 10424-65-4 | -    | -                                             | -   | X    | X    | X     | X     |
| Tetramethylammonium hydroxide                            | 75-59-2    | X    | ACTIVE                                        | X   | -    | X    | X     | X     |

**Legend:** X - Listed '-' - Not Listed

**KECL** - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

#### Authorisation/Restrictions according to EU REACH

Not applicable

| Component                                                | CAS No     | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|----------------------------------------------------------|------------|---------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Methanaminium, N,N,N-trimethyl-, hydroxide, pentahydrate | 10424-65-4 | -                                                                   | -                                                                             | -                                                                                                     |
| Tetramethylammonium hydroxide                            | 75-59-2    | -                                                                   | -                                                                             | -                                                                                                     |

#### Seveso III Directive (2012/18/EC)

| Component | CAS No | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements |
|-----------|--------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|           |        |                                                                                           |                                                                                          |

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|                                                                |            |                |                |
|----------------------------------------------------------------|------------|----------------|----------------|
| Methanaminium,<br>N,N,N-trimethyl-, hydroxide,<br>pentahydrate | 10424-65-4 | Not applicable | Not applicable |
| Tetramethylammonium<br>hydroxide                               | 75-59-2    | Not applicable | Not applicable |

**Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals**

Not applicable

**Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?**

Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

## National Regulations

**UK** - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

## WGK Classification

See table for values

| Component                        | Germany - Water Classification (AwSV) | Germany - TA-Luft Class |
|----------------------------------|---------------------------------------|-------------------------|
| Tetramethylammonium<br>hydroxide | WGK3                                  |                         |

## 15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

## SECTION 16: OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3

H300 - Fatal if swallowed

H310 - Fatal in contact with skin

H314 - Causes severe skin burns and eye damage

H318 - Causes serious 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

### Legend

**CAS** - Chemical Abstracts Service

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**ENCS** - Japanese Existing and New Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

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Tetramethylammonium hydroxide pentahydrate

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**WEL** - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

**RPE** - Respiratory Protective Equipment

**LC50** - Lethal Concentration 50%

**NOEC** - No Observed Effect Concentration

**PBT** - Persistent, Bioaccumulative, Toxic

**TWA** - Time Weighted Average

**IARC** - International Agency for Research on Cancer

Predicted No Effect Concentration (PNEC)

**LD50** - Lethal Dose 50%

**EC50** - Effective Concentration 50%

**POW** - Partition coefficient Octanol:Water

**vPvB** - very Persistent, very Bioaccumulative

**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association

**MARPOL** - International Convention for the Prevention of Pollution from Ships

**ATE** - Acute Toxicity Estimate

**VOC** - (Volatile Organic Compound)

## Key literature references and sources for data

<https://echa.europa.eu/information-on-chemicals>

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

## Training Advice

Chemical incident response training.

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

**Creation Date** 18-May-2010

**Revision Date** 23-Jun-2025

**Revision Summary** SDS sections updated.

**This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.**

## Disclaimer

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**End of Safety Data Sheet**