

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Name : CETAMINE F4000

#### 1.2. Recommended use and restrictions on use

Recommended use : Closed Loop Treatment

#### 1.3. Supplier

Kurita America Inc.  
6600 94th Ave North  
Minneapolis, MN 55445 - USA  
T 866-663-7632  
[kai\\_sds@kurita-water.com](mailto:kai_sds@kurita-water.com) - [www.kuritaamerica.com](http://www.kuritaamerica.com)

#### 1.4. Emergency telephone number

Emergency number : CHEMTEL, For Chemical Emergency Call 800-255-3924 24hr/day 7days/week  
Kurita America: 866-663-7633 International: +01-813-248-0585

### SECTION 2: Hazard(s) identification

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

##### GHS US classification

|   |  |
|---|--|
| Skin corrosion/irritation, Category 1B                            | H314 Causes severe skin burns and eye damage.                        |
| Serious eye damage/eye irritation, Category 1                     | H318 Causes serious eye damage.                                      |
| Specific target organ toxicity – Repeated exposure, Category 1    | H372 Causes damage to organs through prolonged or repeated exposure. |
| Hazardous to the aquatic environment – Acute Hazard, Category 1   | H400 Very toxic to aquatic life.                                     |
| Hazardous to the aquatic environment – Chronic Hazard, Category 1 | H410 Very toxic to aquatic life with long lasting effects.           |

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labelling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H314 - Causes severe skin burns and eye damage.  
H318 - Causes serious eye damage.  
H372 - Causes damage to organs through prolonged or repeated exposure.  
H400 - Very toxic to aquatic life.  
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (GHS US) :

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P273 - Avoid release to the environment.  
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/shower.  
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 - Immediately call a poison center or doctor.  
P314 - Get medical advice/attention if you feel unwell.  
P321 - Specific treatment (see supplemental first aid instruction on this label).  
P363 - Wash contaminated clothing before reuse.  
P391 - Collect spillage.  
P405 - Store locked up.  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

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### 2.3. Other hazards which do not result in classification

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name                                     | Product identifier   | %     | GHS US classification   |
|--|----------------------|-------|---|
| 1,3-Propanediamine, N-(9Z)-9-octadecenyl | (CAS-No.) 7173-62-8  | 1 – 5 | Acute Tox. 4 (Oral), H302<br>Skin Corr. 1B, H314<br>STOT RE 1, H372<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 |
| Amines, tallow alkyl, ethoxylated        | (CAS-No.) 61791-26-2 | 1 – 5 | Acute Tox. 4 (Oral), H302<br>Aquatic Acute 1, H400  |

## 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 (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. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

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

### 5.2. Specific hazards arising from the chemical

- Fire hazard : Not flammable.
- Explosion hazard : None known.
- Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Special protective equipment and precautions for fire-fighters

- 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. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

#### 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.

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

- For containment : Collect spillage.
- 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. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. 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.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### CETAMINE F4000

No additional information available

#### 1,3-Propanediamine, N-(9Z)-9-octadecenyl (7173-62-8)

No additional information available

#### Amines, tallow alkyl, ethoxylated (61791-26-2)

No additional information available

### 8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

#### Hand protection:

Protective gloves

#### Eye protection:

Safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

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

- Physical state : Liquid
- Appearance : clear.
- Colour : Amber
- Odour : Amine-like
- Odour threshold : No data available

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|   |  |
|---|--|
| pH  | : 6.5 – 7.5                              |
| Melting point                                   | : Not applicable                         |
| Freezing point                                  | : 0 °C / 32°F                            |
| Boiling point                                   | : No data available                      |
| Flash point                                     | : None                                   |
| Relative evaporation rate (butylacetate=1)      | : No data available                      |
| Flammability (solid, gas)                       | : Non flammable.                         |
| Vapour pressure                                 | : No data available                      |
| Relative vapour density at 20 °C                | : No data available                      |
| Relative density                                | : 0.99                                   |
| Density   | : 8.3 lb/gal                             |
| Solubility                                      | : Dispersible in water.                  |
| Partition coefficient n-octanol/water (Log Pow) | : No data available                      |
| Auto-ignition temperature                       | : No data available                      |
| Decomposition temperature                       | : No data available                      |
| No data available                               | Viscosity, kinematic : No data available |
| Viscosity, dynamic                              | : No data available                      |
| Explosive limits                                | : No data available                      |
| Explosive properties                            | : No data available                      |
| Oxidising properties                            | : 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

Strong alkalis. Strong oxidizing agents. Strong acids.

### 10.6. Hazardous decomposition products

Carbon oxides (CO, CO<sub>2</sub>). Nitrogen oxides. Ammonia.

## 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 |

| <b>1,3-Propanediamine, N-(9Z)-9-octadecenyl (7173-62-8)</b> |  |
|---|--|
| ATE US (oral)   | 500 mg/kg bodyweight                               |
| <b>Amines, tallow alkyl, ethoxylated (61791-26-2)</b>       |  |
| LD50 oral rat   | 500 mg/kg Source: National Library of Medicine     |
| LD50 dermal rat   | > 10000 mg/kg Source: National Library of Medicine |
| ATE US (oral)   | 500 mg/kg bodyweight                               |

|                           |  |
|---------------------------|--|
| Skin corrosion/irritation | : Causes severe skin burns.<br>pH: 6.5 – 7.5 |
|---------------------------|--|

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|                                   |   |
|-----------------------------------|---|
| Serious eye damage/irritation     | : Causes serious eye damage.<br>pH: 6.5 – 7.5                     |
| 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            | : Causes damage to organs through prolonged or repeated exposure. |

### 1,3-Propanediamine, N-(9Z)-9-octadecenyl (7173-62-8)

|                            |  |
|----------------------------|--|
| NOAEL (oral, rat, 90 days) | 0.4 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents) |
| STOT-repeated exposure     | Causes damage to organs through prolonged or repeated exposure.  |

|                                     |                           |
|-------------------------------------|---------------------------|
| Aspiration hazard                   | : Not classified          |
| Viscosity, kinematic                | : No data available       |
| Symptoms/effects after skin contact | : Burns.                  |
| Symptoms/effects after eye contact  | : Serious damage to eyes. |
| Symptoms/effects after ingestion    | : Burns.                  |

## SECTION 12: Ecological information

### 12.1. Toxicity

|                   |   |
|-------------------|---|
| Ecology - general | : Very toxic to aquatic life with long lasting effects. |
|-------------------|---|

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

#### CETAMINE F4000

|                           |                                |
|---------------------------|--------------------------------|
| Bioaccumulative potential | Not expected to bioaccumulate. |
|---------------------------|--------------------------------|

### 12.4. Mobility in soil

#### CETAMINE F4000

|                |                |
|----------------|----------------|
| Ecology - soil | Soil immobile. |
|----------------|----------------|

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

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

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Not regulated

### Transportation of Dangerous Goods

Not applicable

### Air transport

Not applicable

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### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

#### Amines, tallow alkyl, ethoxylated (61791-26-2)

EPA TSCA Regulatory Flag

XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).

#### 15.2. International regulations

##### CANADA

#### 1,3-Propanediamine, N-(9Z)-9-octadecenyl (7173-62-8)

Listed on the Canadian DSL (Domestic Substances List)

#### Amines, tallow alkyl, ethoxylated (61791-26-2)

Listed on the Canadian DSL (Domestic Substances List)

##### EU-Regulations

No additional information available

##### National regulations

#### 1,3-Propanediamine, N-(9Z)-9-octadecenyl (7173-62-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Listed on INSQ (Mexican National Inventory of Chemical Substances)

#### Amines, tallow alkyl, ethoxylated (61791-26-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Listed on INSQ (Mexican National Inventory of Chemical Substances)

#### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

### SECTION 16: Other information

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Revision date : 10/26/2021

Kurita - SDS US (GHS HazCom 2012)

**Author:** Kurita Water Industries Ltd.

**Revision Notes:** Updated to GHS format

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