



# SILVER FERN CHEMICAL, INC.

## Safety Data Sheet

### Cocamide DEA

## Section 1. Identification

**Product name** : Cocamide DEA

**Product type** : Liquid

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

Not applicable.

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

Silver Fern Chemical, Inc.  
121 W. De La Guerra Street, Suite B  
Santa Barbara, CA 93101  
Ph: 866-282-3384

info@silverfernchemical.com

**24 Hr Emergency Contact** : **Infotrac 1-800-535-5053 (USA & Canada)**  
**1-352-323-3500(Outside USA & Canada)**

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : ACUTE TOXICITY (oral) - Category 4  
SKIN IRRITATION - Category 2  
EYE IRRITATION - Category 2A  
CARCINOGENICITY - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

### GHS label elements

**Hazard pictograms** :



**Signal word** : Warning

**Hazard statements** : H302 - Harmful if swallowed.  
H319 - Causes serious eye irritation.  
H315 - Causes skin irritation.  
H351 - Suspected of causing cancer.  
H373 - May cause damage to organs through prolonged or repeated exposure.

### Precautionary statements

## Section 2. Hazards identification

- Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
- Response** : Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
- Storage** : Store locked up.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Hazards not otherwise classified** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

| Ingredient name                     | % w/w    | CAS number |
|-------------------------------------|----------|------------|
| Amides, coco, N,N-bis(hydroxyethyl) | 80 - 100 | 68603-42-9 |
| glycerol                            | 7 - 13   | 56-81-5    |
| Diethanolamine                      | 3 - 7    | 111-42-2   |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

## Section 4. First aid measures

**Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

**Eye contact** : Causes serious eye irritation.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : Causes skin irritation.  
**Ingestion** : Harmful if swallowed.

#### Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:  
 pain or irritation  
 watering  
 redness  
**Inhalation** : No specific data.  
**Skin contact** : Adverse symptoms may include the following:  
 irritation  
 redness  
**Ingestion** : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.  
**Specific treatments** : No specific treatment.  
**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.  
**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
 carbon dioxide  
 carbon monoxide  
 nitrogen oxides

## Section 5. Fire-fighting measures

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## Section 7. Handling and storage

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

| Ingredient name                              | Exposure limits   |
|--|---|
| Amides, coco, N,N-bis(hydroxyethyl) glycerol | None.<br><b>OSHA PEL 1989 (United States, 3/1989).</b><br>TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Respirable fraction<br>TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Total dust<br><b>OSHA PEL (United States, 6/2016).</b><br>TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Respirable fraction<br>TWA: 15 mg/m <sup>3</sup> 8 hours. Form: Total dust                      |
| Diethanolamine                               | <b>OSHA PEL 1989 (United States, 3/1989).</b><br>TWA: 3 ppm 8 hours.<br>TWA: 15 mg/m <sup>3</sup> 8 hours.<br><b>NIOSH REL (United States, 10/2016).</b><br>TWA: 3 ppm 10 hours.<br>TWA: 15 mg/m <sup>3</sup> 10 hours.<br><b>ACGIH TLV (United States, 3/2017). Absorbed through skin.</b><br>TWA: 1 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction and vapor |

**Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

## Section 8. Exposure controls/personal protection

- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid. [Oily liquid. ]
- Color** : Yellow. Clear. [Light]
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : Not available.
- Flash point** : Closed cup: >149°C (>300,2°F)
- Relative density** : 0,98
- Solubility** : Not available.
- Solubility in water (g/l)** : Not available.
- Viscosity** : Not available.

## Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : No specific data.
- Incompatible materials** : No specific data.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name | Result    | Species | Dose        | Exposure |
|-------------------------|-----------|---------|-------------|----------|
| glycerol                | LD50 Oral | Rat     | 12600 mg/kg | -        |

#### Irritation/Corrosion

| Product/ingredient name              | Result                   | Species | Score | Exposure                | Observation |
|--------------------------------------|--------------------------|---------|-------|-------------------------|-------------|
| Amides, coco, N,N-bis (hydroxyethyl) | Eyes - Severe irritant   | Rabbit  | -     | 100 microliters         | -           |
|                                      | Skin - Moderate irritant | Rabbit  | -     | 300 microliters         | -           |
| glycerol                             | Eyes - Mild irritant     | Rabbit  | -     | 24 hours 500 milligrams | -           |
|                                      | Skin - Mild irritant     | Rabbit  | -     | 24 hours 500 milligrams | -           |
| Diethanolamine                       | Eyes - Severe irritant   | Rabbit  | -     | 24 hours 750 Micrograms | -           |
|                                      | Eyes - Severe irritant   | Rabbit  | -     | 5500 milligrams         | -           |
|                                      | Skin - Mild irritant     | Rabbit  | -     | 24 hours 500 milligrams | -           |
|                                      | Skin - Mild irritant     | Rabbit  | -     | 50 milligrams           | -           |

#### Sensitization

No known significant effects or critical hazards.

#### Mutagenicity

No known significant effects or critical hazards.

#### Carcinogenicity

No known significant effects or critical hazards.

#### Classification

| Product/ingredient name              | OSHA | IARC | NTP |
|--------------------------------------|------|------|-----|
| Amides, coco, N,N-bis (hydroxyethyl) | -    | 2B   | -   |
| Diethanolamine                       | -    | 2B   | -   |

#### Reproductive toxicity

No known significant effects or critical hazards.

#### Teratogenicity

No known significant effects or critical hazards.

#### Specific target organ toxicity (single exposure)

No known significant effects or critical hazards.

#### Specific target organ toxicity (repeated exposure)

| Name           | Category   | Route of exposure | Target organs  |
|----------------|------------|-------------------|----------------|
| Diethanolamine | Category 2 | Not determined    | Not determined |

#### Aspiration hazard

No known significant effects or critical hazards.



## Section 11. Toxicological information

**Information on the likely routes of exposure** : Routes of entry anticipated: Oral, Dermal.

### Potential acute health effects

**Eye contact** : Causes serious eye irritation.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : Causes skin irritation.  
**Ingestion** : Harmful if swallowed.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:  
 pain or irritation  
 watering  
 redness  
**Inhalation** : No specific data.  
**Skin contact** : Adverse symptoms may include the following:  
 irritation  
 redness  
**Ingestion** : No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

### Potential chronic health effects

No known significant effects or critical hazards.

**General** : May cause damage to organs through prolonged or repeated exposure.  
**Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Teratogenicity** : No known significant effects or critical hazards.  
**Developmental effects** : No known significant effects or critical hazards.  
**Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

| Route | ATE value    |
|-------|--------------|
| Oral  | 1756,8 mg/kg |



## Section 12. Ecological information

### Toxicity

| Product/ingredient name | Result                            | Species                                    | Exposure |
|-------------------------|-----------------------------------|--|----------|
| Diethanolamine          | Acute EC50 12 mg/l Fresh water    | Algae - Pseudokirchneriella subcapitata    | 96 hours |
|                         | Acute LC50 28800 µg/l Fresh water | Crustaceans - Ceriodaphnia dubia - Neonate | 48 hours |
|                         | Acute LC50 2150 µg/l Fresh water  | Daphnia - Daphnia pulex                    | 48 hours |
|                         | Acute LC50 775 mg/l Fresh water   | Fish - Lepomis macrochirus                 | 96 hours |

### Persistence and degradability

Not available.

### Bioaccumulative potential

| Product/ingredient name | LogP <sub>ow</sub> | BCF | Potential |
|-------------------------|--------------------|-----|-----------|
| glycerol                | -1,76              | -   | low       |
| Diethanolamine          | -1,43              | -   | low       |

### Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>) : Not available.

Other adverse effects : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

|                            | DOT Classification | TDG Classification | Mexico Classification | IMDG           | IATA           |
|----------------------------|--------------------|--------------------|-----------------------|----------------|----------------|
| UN number                  | Not regulated.     | Not regulated.     | Not regulated.        | Not regulated. | Not regulated. |
| UN proper shipping name    | -                  | -                  | -                     | -              | -              |
| Transport hazard class(es) | -                  | -                  | -                     | -              | -              |
| Packing group              | -                  | -                  | -                     | -              | -              |

## Section 14. Transport information

| Environmental hazards | No. | No. | No. | No. | No. |
|-----------------------|-----|-----|-----|-----|-----|
|-----------------------|-----|-----|-----|-----|-----|

### Additional information

**DOT Classification** : **Reportable quantity** 2000 lbs / 907.18 kg. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL and the IBC Code** : Not available.

## Section 15. Regulatory information

### Canada

**Canadian NPRI** : The following components are listed: Diethanolamine (and its salts)

**CEPA Toxic substances** : None of the components are listed.

### United States

**U.S. Federal regulations** : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : ACUTE TOXICITY (oral) - Category 4  
SKIN IRRITATION - Category 2  
EYE IRRITATION - Category 2A  
CARCINOGENICITY - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

#### Composition/information on ingredients

## Section 15. Regulatory information

| Name                                    | %         | Classification  |
|---|-----------|---|
| Amides, coco, N,N-bis<br>(hydroxyethyl) | ≥75 - ≤90 | SKIN IRRITATION - Category 2<br>EYE IRRITATION - Category 2A<br>CARCINOGENICITY - Category 2  |
| glycerol                                | ≤10       | EYE IRRITATION - Category 2A  |
| Diethanolamine                          | ≤5        | ACUTE TOXICITY (oral) - Category 4<br>SKIN IRRITATION - Category 2<br>EYE IRRITATION - Category 2A<br>CARCINOGENICITY - Category 2<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 |

### SARA 313

|                                 | Product name        | CAS number | %  |
|---------------------------------|---------------------|------------|----|
| Form R - Reporting requirements | 2,2'-iminodiethanol | 111-42-2   | ≤5 |
| Supplier notification           | 2,2'-iminodiethanol | 111-42-2   | ≤5 |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### California Prop. 65

**⚠ WARNING:** This product can expose you to chemicals including Coconut oil diethanolamine condensate, Diethanolamine, which are known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

| Ingredient name                       | No significant risk level | Maximum acceptable dosage level |
|---------------------------------------|---------------------------|---------------------------------|
| Coconut oil diethanolamine condensate | -                         | -                               |
| Diethanolamine                        | -                         | -                               |

### Mexico

#### National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol (Annexes A, B, C, E)

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

## Section 15. Regulatory information

### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

**Canada** : All components are listed or exempted.

**United States** : All components are listed or exempted.

**Europe** : All components are listed or exempted.

## Section 16. Other information

### Procedure used to derive the classification

| Classification  | Justification      |
|---|--------------------|
| ACUTE TOXICITY (oral) - Category 4                              | Calculation method |
| SKIN IRRITATION - Category 2                                    | Calculation method |
| EYE IRRITATION - Category 2A                                    | Calculation method |
| CARCINOGENICITY - Category 2                                    | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 | Calculation method |

### History

**Date of issue/Date of revision** : 2025-05-29

**Date of previous issue** : 2019-02-07

**Version** : 3

**Key to abbreviations** : ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 IATA = International Air Transport Association  
 IBC = Intermediate Bulk Container  
 IMDG = International Maritime Dangerous Goods  
 LogPow = logarithm of the octanol/water partition coefficient  
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
 UN = United Nations

### **DISCLAIMER OF RESPONSIBILITY**

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