

## Safety Data Sheet

### Section 1. Identification

**Product name** : ALPHA® SLS-65 FLUX  
**Product code** : 115327  
**Product type** : Liquid.  
**Date of issue/Date of revision** : May 27 2025.

| Manufacturer - Supplier                                                                                                | Telephone no.:                                          | Emergency phone:                              |
|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|-----------------------------------------------|
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### 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** : FLAMMABLE LIQUIDS - Category 2  
 EYE IRRITATION - Category 2A  
 TOXIC TO REPRODUCTION - Category 1B  
 SPECIFIC TARGET ORGAN TOXICITY (Narcotic effects) - Category 3  
 AQUATIC HAZARD (ACUTE) - Category 3  
 AQUATIC HAZARD (LONG-TERM) - Category 3

#### GHS label elements

##### Hazard pictograms



##### Signal word

: Danger

##### Hazard statements

: Highly flammable liquid and vapor.  
 Causes serious eye irritation.  
 May cause drowsiness or dizziness.  
 May damage fertility or the unborn child.  
 Harmful to aquatic life with long lasting effects.

#### Precautionary statements

##### Prevention

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapor. Wash thoroughly after handling.

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## Section 2. Hazards identification

|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Response</b>                         | : IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. 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 advice or attention. |
| <b>Storage</b>                          | : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Disposal</b>                         | : Dispose of contents and container in accordance with all local, regional, national and international regulations.                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Supplemental label elements</b>      | : Avoid contact with skin and clothing. Wash thoroughly after handling.                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Hazards not otherwise classified</b> | : Prolonged or repeated contact may dry skin and cause irritation.                                                                                                                                                                                                                                                                                                                                                                                                                   |

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

| <b>Ingredient name</b> | <b>%</b> | <b>CAS number</b> |
|------------------------|----------|-------------------|
| Isopropyl alcohol      | 80-100   | 67-63-0           |
| ester                  | 1-10     | -                 |
| Organic acid           | 1-10     | -                 |
| Ester.                 | 0.1-1.0  | -                 |
| Surfactant.            | 0.1-1.0  | -                 |

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 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

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eye contact</b>  | : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 30 minutes, keeping eyelids open. Get medical attention.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Inhalation</b>   | : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that mists are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 necessary, call a poison center or physician. 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. |
| <b>Skin contact</b> | : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 15 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Ingestion</b>    | : Wash out mouth with water. Remove dentures if any. 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                 |

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## Section 4. First aid measures

or waistband.

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

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
- Skin contact** : Defatting to the skin. May cause skin dryness and irritation.
- Ingestion** : Can cause central nervous system (CNS) depression.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:  
irritation  
dryness  
cracking  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that mists are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

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## Section 5. Fire-fighting measures

- Specific hazards arising from the chemical** : Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide
- 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- 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. Shut off all ignition sources. No flares, smoking or flames in hazard area. 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). Water polluting material. May be harmful to the environment if released in large quantities.

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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. Use spark-proof tools and explosion-proof equipment. 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. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. 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.

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

: Store between the following temperatures: 10 to 43°C (50 to 109.4°F). Store in accordance with local regulations. Store in a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. 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

Isopropyl alcohol

**ACGIH TLV (United States, 7/2023). Notes: Refers to Appendix A - Carcinogens. ACGIH 2003 Adoption**

STEL: 400 ppm 15 minutes.

TWA: 200 ppm 8 hours.

**NIOSH REL (United States, 10/2020).**

STEL: 1225 mg/m<sup>3</sup> 15 minutes.

STEL: 500 ppm 15 minutes.

TWA: 980 mg/m<sup>3</sup> 10 hours.

TWA: 400 ppm 10 hours.

**OSHA PEL (United States, 5/2018).**

TWA: 980 mg/m<sup>3</sup> 8 hours.

TWA: 400 ppm 8 hours.

**OSHA PEL 1989 (United States, 3/1989).**

STEL: 1225 mg/m<sup>3</sup> 15 minutes.

STEL: 500 ppm 15 minutes.

TWA: 980 mg/m<sup>3</sup> 8 hours.

TWA: 400 ppm 8 hours.

ester

**Manufacturer (in Switzerland or another country) (United States).**

TWA: 10 mg/m<sup>3</sup>

Organic acid

**ACGIH TLV (United States, 7/2023).**

TWA: 5 mg/m<sup>3</sup> 8 hours.

## Section 8. Exposure controls/personal protection

|                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Appropriate engineering controls</b>      | : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.                                                                                                                                                                                                                          |
| <b>Environmental exposure controls</b>       | : 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.                                                                                                                                                                                                                                                                               |
| <b><u>Individual protection measures</u></b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Hygiene measures</b>                      | : 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.                                                                                                                                                                                                                |
| <b>Eye/face protection</b>                   | : 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.                                                                                                                                                                                                                                                         |
| <b><u>Skin protection</u></b>                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Hand protection</b>                       | : 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. |
| <b>Body protection</b>                       | : 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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.                                                                                                                                                                                    |
| <b>Other skin protection</b>                 | : 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.                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Respiratory protection</b>                | : 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 and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

|                                                                |                  |
|----------------------------------------------------------------|------------------|
| <b>Physical state</b>                                          | : Liquid.        |
| <b>Color</b>                                                   | : Colorless.     |
| <b>Odor</b>                                                    | : Alcohol-like.  |
| <b>Odor threshold</b>                                          | : Not available. |
| <b>pH</b>                                                      | : Not available. |
| <b>Melting point/freezing point</b>                            | : Not available. |
| <b>Boiling point, initial boiling point, and boiling range</b> | : 80°C (176°F)   |

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## Section 9. Physical and chemical properties and safety characteristics

|                                                    |                                                          |
|----------------------------------------------------|----------------------------------------------------------|
| Flash point                                        | : Closed cup: 12°C (53.6°F)                              |
| Evaporation rate                                   | : Not available.                                         |
| Flammability                                       | : Not available.                                         |
| Lower and upper explosion limit/flammability limit | : Not available.                                         |
| Vapor pressure                                     | : Not available.                                         |
| Relative vapor density                             | : >1 [Air = 1]                                           |
| Relative density                                   | : 0.7998                                                 |
| Solubility                                         | : Easily soluble in the following materials: cold water. |
| VOC                                                | : 764.9 g/l                                              |
| Partition coefficient: n-octanol/water             | : Not applicable.                                        |
| Auto-ignition temperature                          | : 399°C (750.2°F)                                        |
| Decomposition temperature                          | : Not available.                                         |
| Viscosity                                          | : Not available.                                         |
| Flow time (ISO 2431)                               | : Not available.                                         |
| <u>Particle characteristics</u>                    |                                                          |
| Median particle size                               | : Not applicable.                                        |

## 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                     | : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas. |
| Incompatibility with various substances | : Reactive or incompatible with the following materials: oxidizing materials, reducing materials, metals, acids and alkalis.                                                                                                         |
| Hazardous decomposition products        | : Under normal conditions of storage and use, hazardous decomposition products should not be produced.                                                                                                                               |
| Other Hazardous decomposition products  | : carbon oxides (CO, CO <sub>2</sub> )                                                                                                                                                                                               |
| Hazardous polymerization                | : Under normal conditions of storage and use, hazardous polymerization will not occur.                                                                                                                                               |

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name | Result      | Species    | Dose         | Exposure |
|-------------------------|-------------|------------|--------------|----------|
| Isopropyl alcohol       | LD50 Dermal | Rabbit     | 6290 mg/kg   | -        |
|                         | LD50 Oral   | Rat        | 4.7 g/kg     | -        |
| ester                   | LD50 Dermal | Rabbit     | >5000 mg/kg  | -        |
|                         | LD50 Oral   | Rat        | 6400 mg/kg   | -        |
| Organic acid            | LD50 Dermal | Rabbit     | >7940 mg/kg  | -        |
|                         | LD50 Oral   | Rabbit     | >11000 mg/kg | -        |
|                         | LD50 Oral   | Rat        | 5050 mg/kg   | -        |
|                         | LD50 Oral   | Rat        | >11000 mg/kg | -        |
| Ester.                  | LD50 Oral   | Guinea pig | 12900 mg/kg  | -        |

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**Section 11. Toxicological information**

|             |             |        |             |   |
|-------------|-------------|--------|-------------|---|
| Surfactant. | LD50 Oral   | Mouse  | 15000 mg/kg | - |
|             | LD50 Oral   | Rat    | 7392 mg/kg  | - |
|             | LD50 Oral   | Rat    | 7392 mg/kg  | - |
|             | LD50 Dermal | Rabbit | >2000 mg/kg | - |
|             | LD50 Oral   | Rat    | 6300 mg/kg  | - |

**Irritation/Corrosion**

| Product/ingredient name                        | Result                   | Species | Score | Exposure        | Observation |
|------------------------------------------------|--------------------------|---------|-------|-----------------|-------------|
| Isopropyl alcohol<br><br>ester<br>Organic acid | Eyes - Moderate irritant | Rabbit  | -     | 24 hours 100 mg | -           |
|                                                | Eyes - Moderate irritant | Rabbit  | -     | 10 mg           | -           |
|                                                | Eyes - Severe irritant   | Rabbit  | -     | 100 mg          | -           |
|                                                | Skin - Mild irritant     | Rabbit  | -     | 500 mg          | -           |
|                                                | Eyes - Moderate irritant | Rabbit  | -     | 0.1 MI          | -           |
|                                                | Eyes - Mild irritant     | Rabbit  | -     | 10 mg           | -           |
|                                                | Eyes - Moderate irritant | Rabbit  | -     | 24 hours 20 mg  | -           |
|                                                | Skin - Mild irritant     | Rabbit  | -     | 0.25 gm         | -           |

**Sensitization**

Not available.

**Mutagenicity**

Not available.

**Carcinogenicity**

Not available.

**Classification**

| Product/ingredient name | OSHA | IARC | NTP |
|-------------------------|------|------|-----|
| Isopropyl alcohol       | -    | 3    | -   |
| Ester.                  | -    | 3    | -   |

**Reproductive toxicity**

| Product/ingredient name | Maternal toxicity | Fertility | Development toxin | Species      | Dose                | Exposure                                              |
|-------------------------|-------------------|-----------|-------------------|--------------|---------------------|-------------------------------------------------------|
| Ester.                  | -                 | Positive  | -                 | Rat - Female | Oral:<br>2000 mg/kg | 3 weeks<br>During<br>Pregnancy;<br>7 days per<br>week |
|                         | -                 | Positive  | -                 | Rat - Female | Oral:<br>1000 mg/kg | 3 weeks<br>During<br>Pregnancy;<br>7 days per<br>week |

**Teratogenicity**

| Product/ingredient name | Result          | Species      | Dose      | Exposure                    |
|-------------------------|-----------------|--------------|-----------|-----------------------------|
| Ester.                  | Positive - Oral | Rat - Female | 400 mg/kg | 17 days During<br>Pregnancy |

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

| Product/ingredient name | Category   | Route of exposure | Target organs    |
|-------------------------|------------|-------------------|------------------|
| Isopropyl alcohol       | Category 3 | -                 | Narcotic effects |

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

Not available.

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## Section 11. Toxicological information

### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Eye contact. Inhalation. Ingestion.

### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

**Skin contact** : Defatting to the skin. May cause skin dryness and irritation.

**Ingestion** : Can cause central nervous system (CNS) depression.

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

**Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

**Inhalation** : Adverse symptoms may include the following:  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

**Skin contact** : Adverse symptoms may include the following:  
irritation  
dryness  
cracking  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

**Ingestion** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

### 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

Not available.

**General** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

## Section 11. Toxicological information

**Reproductive toxicity** : May damage fertility or the unborn child.

### Numerical measures of toxicity

#### Acute toxicity estimates

| Route | ATE value     |
|-------|---------------|
| Oral  | 5162.12 mg/kg |

## Section 12. Ecological information

### Toxicity

| Product/ingredient name | Result                               | Species                                                                | Exposure |
|-------------------------|--------------------------------------|------------------------------------------------------------------------|----------|
| Isopropyl alcohol       | Acute EC50 7550 mg/l Fresh water     | Daphnia - Daphnia magna - Neonate                                      | 48 hours |
|                         | Acute LC50 1400000 µg/l Marine water | Crustaceans - Crangon crangon                                          | 48 hours |
| ester                   | Acute LC50 4200 mg/l Fresh water     | Fish - Rasbora heteromorpha                                            | 96 hours |
| Organic acid            | Acute LC50 30.9 mg/l                 | Fish                                                                   | 96 hours |
|                         | Acute LC50 97000 µg/l Fresh water    | Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) | 96 hours |
| Ester.                  | Acute LC50 >0.78 mg/l                | Algae                                                                  | 96 hours |
|                         | Acute LC50 660 µg/l Fresh water      | Daphnia - Daphnia magna                                                | 48 hours |
|                         | Acute LC50 >0.78 mg/l                | Fish                                                                   | 96 hours |
|                         | Acute LC50 >0.78 mg/l                | Fish                                                                   | 96 hours |
|                         | Acute LC50 >0.78 mg/l                | Fish                                                                   | 96 hours |
| Surfactant.             | Acute EC50 253 mg/l                  | Algae                                                                  | 72 hours |

### Persistence and degradability

Not available.

### Bioaccumulative potential

| Product/ingredient name | LogP <sub>ow</sub> | BCF   | Potential |
|-------------------------|--------------------|-------|-----------|
| Isopropyl alcohol       | 0.05               | -     | low       |
| ester                   | 0.49               | -     | low       |
| Organic acid            | 0.093              | 3.162 | low       |
| Ester.                  | 8.94               | 27    | 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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

|                            | DOT<br>Classification                                                                    | TDG<br>Classification                                                                    | Mexico<br>Classification                                                                 | UN                                                                                        | IMDG                                                                                       | IATA                                                                                       |
|----------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| UN number                  | UN1219                                                                                   | UN1219                                                                                   | UN1219                                                                                   | UN1219                                                                                    | UN1219                                                                                     | UN1219                                                                                     |
| UN proper shipping name    | Isopropanol solution                                                                     | Isopropanol solution                                                                     | Isopropanol solution                                                                     | Isopropanol solution                                                                      | Isopropanol solution                                                                       | Isopropanol solution                                                                       |
| Transport hazard class(es) | 3<br> | 3<br> | 3<br> | 3<br> | 3<br> | 3<br> |
| Packing group              | II                                                                                       | II                                                                                       | II                                                                                       | II                                                                                        | II                                                                                         | II                                                                                         |
| Environmental hazards      | No.                                                                                      | No.                                                                                      | No.                                                                                      | No.                                                                                       | No.                                                                                        | No.                                                                                        |

|                                             |          |
|---------------------------------------------|----------|
| Additional information - DOT Classification | ERG# 129 |
|---------------------------------------------|----------|

**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.

## Section 15. Regulatory information

**U.S. Federal regulations** : TSCA 5(a)2 proposed significant new use rule (SNUR): No products were found.  
TSCA 5(a)2 final significant new use rule (SNUR): No products were found.  
TSCA 12(b) one-time export notification: No products were found.  
TSCA 12(b) annual export notification: No products were found.

**United States inventory (TSCA 8b)** : All components are listed or exempted.

[SARA 302/304](#)

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## Section 15. Regulatory information

### Composition/information on ingredients

No products were found.

### SARA 311/312

**Classification** : FLAMMABLE LIQUIDS - Category 2  
EYE IRRITATION - Category 2A  
TOXIC TO REPRODUCTION - Category 1B  
SPECIFIC TARGET ORGAN TOXICITY (Narcotic effects) - Category 3  
HNOC - Defatting irritant

### California Prop. 65

 **WARNING:** Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### Canada

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

### International regulations

#### Inventory list

**Australia** : All components are listed or exempted.  
**China** : All components are listed or exempted.  
**Japan** : ☒ All components are listed or exempted.  
**New Zealand** : All components are listed or exempted.  
**Philippines** : All components are listed or exempted.  
**Republic of Korea** : All components are listed or exempted.  
**Taiwan** : All components are listed or exempted.

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

|                  |   |
|------------------|---|
| Health           | 1 |
| Flammability     | 3 |
| Physical hazards | 0 |
|                  |   |

### Procedure used to derive the classification

| Classification                                                                                                                                                                                                                                            | Justification                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| FLAMMABLE LIQUIDS - Category 2<br>EYE IRRITATION - Category 2A<br>TOXIC TO REPRODUCTION - Category 1B<br>SPECIFIC TARGET ORGAN TOXICITY (Narcotic effects) - Category 3<br>AQUATIC HAZARD (ACUTE) - Category 3<br>AQUATIC HAZARD (LONG-TERM) - Category 3 | On basis of test data<br>Calculation method<br>Calculation method<br>Calculation method<br>Calculation method<br>Calculation method |

### History

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## Section 16. Other information

### 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)  
N/A = Not available  
SGG = Segregation Group  
UN = United Nations

### References

: Not available.

Indicates information that has changed from previously issued version.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.