



**WORK SOLUTION**  
**SDS**



# Zone Out™ Work Solution

## 1-6 oz Solution

### Safety Data Sheet

Issue Date: 14-Oct-2024

Revision Date: 18-Oct-2024

Version 1

#### 1. IDENTIFICATION

**Product identifier**

**Product Name**

Zone Out Work Solution (1-6 oz / gallon of water)

**Other means of identification**

**SDS #**

NIS-068

**Recommended use of the chemical and restrictions on use**

**Recommended Use**

Insecticide.

**Details of the supplier of the safety data sheet**

**Manufacturer Address**

Nisus Corporation  
100 Nisus Drive  
Rockford, TN 37853

**Emergency telephone number**

**Company Phone Number**

Phone: (800)-264-0870

Fax: (865) 577-5825

**Emergency Telephone**

INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

#### 2. HAZARDS IDENTIFICATION

**Appearance** Pale yellow liquid

**Physical state** Liquid

**Odor** Clove Cedarwood

**Classification :** None

**Signal word:** None

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical name     | CAS No  | Weight-% |
|-------------------|---------|----------|
| Isopropyl Alcohol | 67-63-0 | 0.1-1    |

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

#### 4. FIRST AID MEASURES

##### Description of first aid measures

|                       |  |
|-----------------------|--|
| <b>General Advice</b> | Provide this SDS to medical personnel for treatment.   |
| <b>Eye Contact</b>    | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| <b>Skin Contact</b>   | Wash off immediately with plenty of water for at least 15 minutes.   |
| <b>Inhalation</b>     | Remove to fresh air.   |
| <b>Ingestion</b>      | Clean mouth with water and drink afterwards plenty of water.   |

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

|                 |                 |
|-----------------|-----------------|
| <b>Symptoms</b> | Not determined. |
|-----------------|-----------------|

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

|                           |                        |
|---------------------------|------------------------|
| <b>Notes to Physician</b> | Treat symptomatically. |
|---------------------------|------------------------|

#### 5. FIRE-FIGHTING MEASURES

##### Suitable Extinguishing Media

Use CO2, dry chemical, or foam for extinction.

**Unsuitable Extinguishing Media** Not determined.

##### Specific Hazards Arising from the Chemical

Not determined.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

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

|                             |  |
|-----------------------------|--|
| <b>Personal Precautions</b> | Use personal protective equipment as required. |
|-----------------------------|--|

##### Environmental precautions

|                                  |   |
|----------------------------------|---|
| <b>Environmental precautions</b> | See Section 12 for additional Ecological Information. |
|----------------------------------|---|

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

|                                |   |
|--------------------------------|---|
| <b>Methods for Containment</b> | Prevent further leakage or spillage if safe to do so. |
| <b>Methods for Clean-Up</b>    | Keep in suitable, closed containers for disposal.     |

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible Materials** None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

| Chemical name                | ACGIH TLV                     | OSHA PEL  | NIOSH IDLH  |
|------------------------------|-------------------------------|---|---|
| Isopropyl Alcohol<br>67-63-0 | STEL: 400 ppm<br>TWA: 200 ppm | TWA: 400 ppm<br>TWA: 980 mg/m <sup>3</sup><br>(vacated) TWA: 400 ppm<br>(vacated) TWA: 980 mg/m <sup>3</sup><br>(vacated) STEL: 500 ppm<br>(vacated) STEL: 1225 mg/m <sup>3</sup> | IDLH: 2000 ppm<br>TWA: 400 ppm<br>TWA: 980 mg/m <sup>3</sup><br>STEL: 500 ppm<br>STEL: 1225 mg/m <sup>3</sup> |

### Appropriate engineering controls

**Engineering Controls** Apply technical measures to comply with the occupational exposure limits.

### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Refer to 29 CFR 1910.133 for eye and face protection regulations.

**Skin and Body Protection** Refer to 29 CFR 1910.138 for appropriate skin and body protection.

**Respiratory Protection** Refer to 29 CFR 1910.134 for respiratory protection requirements.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

|                       |                    |                       |                 |
|-----------------------|--------------------|-----------------------|-----------------|
| <b>Physical state</b> | Liquid             | <b>Odor</b>           | Clove Cedarwood |
| <b>Appearance</b>     | Pale yellow liquid | <b>Odor Threshold</b> | Not determined  |
| <b>Color</b>          | Pale yellow        |                       |                 |

| <u>Property</u>                         | <u>Values</u>     | <u>Remarks • Method</u> |
|---|-------------------|-------------------------|
| pH                                      | No data available |                         |
| Melting point / freezing point          | No data available |                         |
| Initial boiling point and boiling range | No data available |                         |
| Flash point                             | No data available |                         |
| Evaporation Rate                        | Not determined    |                         |
| Flammability (Solid, Gas)               | Not determined    |                         |
| Flammability Limit in Air               |                   |                         |
| Upper flammability or explosive limits  | No data available |                         |

|   |                   |
|---|-------------------|
| <b>Lower flammability or explosive limits</b> | No data available |
| <b>Vapor Pressure</b>                         | Not determined    |
| <b>Vapor Density</b>                          | No data available |
| <b>Relative Density</b>                       | Not determined    |
| <b>Water Solubility</b>                       | Soluble in water  |
| <b>Solubility in other solvents</b>           | Not determined    |
| <b>Partition Coefficient</b>                  | Not determined    |
| <b>Autoignition temperature</b>               | No data available |
| <b>Decomposition temperature</b>              | Not determined    |
| <b>Kinematic viscosity</b>                    | Not determined    |
| <b>Dynamic Viscosity</b>                      | Not determined    |
| <b>Explosive Properties</b>                   | Not determined    |
| <b>Oxidizing Properties</b>                   | Not determined    |

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

None under normal processing.

### Conditions to Avoid

Keep out of reach of children.

### Incompatible materials

None known based on information supplied.

### Hazardous decomposition products

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

**Eye Contact** Avoid contact with eyes.

**Skin Contact** Avoid contact with skin.

**Inhalation** Do not inhale.

**Ingestion** Do not ingest.

### Component Information

| Chemical name                             | Oral LD50            | Dermal LD50             | Inhalation LC50         |
|---|----------------------|-------------------------|-------------------------|
| Ethyl (S)-2-hydroxypropionate<br>687-47-8 | > 2000 mg/kg ( Rat ) | -                       | > 5.4 mg/L ( Rat ) 4 h  |
| Cottonseed oil<br>8001-29-4               | > 90 mL/kg ( Rat )   | -                       | -                       |
| Isopropyl Alcohol<br>67-63-0              | = 1870 mg/kg ( Rat ) | = 4059 mg/kg ( Rabbit ) | > 10000 ppm ( Rat ) 6 h |

|  |                       |                         |                                      |
|--|-----------------------|-------------------------|--------------------------------------|
| Cornmint Oil<br>68917-18-0             | = 1240 mg/kg ( Rat )  | -                       | -                                    |
| Clove Oil<br>8000-34-8                 | = 1370 mg/kg ( Rat )  | = 1200 mg/kg ( Rabbit ) | -                                    |
| Essential Oil<br>97-53-0               | = 1930 mg/kg ( Rat )  | -                       | -                                    |
| Thyme Oil<br>8007-46-3                 | = 2840 mg/kg ( Rat )  | -                       | -                                    |
| Cinnamon oil, Ceylon type<br>8015-91-6 | = 2650 mg/kg ( Rat )  | = 702 mg/kg ( Rabbit )  | -                                    |
| Sodium lauryl sulfate<br>151-21-3      | = 1288 mg/kg ( Rat )  | = 200 mg/kg ( Rabbit )  | > 3900 mg/m <sup>3</sup> ( Rat ) 1 h |
| Oleic Acid<br>112-80-1                 | = 25 g/kg ( Rat )     | -                       | -                                    |
| Triethyl Citrate<br>77-93-0            | = 5900 mg/kg ( Rat )  | > 5 g/kg ( Rabbit )     | = 1300 ppm ( Rat ) 6 h               |
| Monolaurin<br>142-18-7                 | = 53400 µL/kg ( Rat ) | -                       | -                                    |
| Sesame oil<br>8008-74-0                | -                     | > 2 g/kg ( Rabbit )     | -                                    |

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

#### Symptoms

Please see section 4 of this SDS for symptoms.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Carcinogenicity

Group 3 IARC components are "not classifiable as human carcinogens".

| Chemical name                | ACGIH | IARC    | NTP | OSHA |
|------------------------------|-------|---------|-----|------|
| Isopropyl Alcohol<br>67-63-0 |       | Group 3 |     | X    |
| Essential Oil<br>97-53-0     |       | Group 3 |     |      |

#### Legend

*IARC (International Agency for Research on Cancer)*

*Group 3 IARC components are "not classifiable as human carcinogens"*

*Occupational Safety and Health Administration of the US Department of Labor*

*X - Present*

### Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document not available

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Harmful to aquatic life with long lasting effects.

### Component Information

| Chemical name                             | Algae/aquatic plants   | Fish   | Crustacea                             |
|---|--|--|---------------------------------------|
| Ethyl (S)-2-hydroxypropionate<br>687-47-8 |  | LC50: =320mg/L (96h, Brachydanio rerio)  | EC50: =683mg/L (48h, Daphnia magna)   |
| Isopropyl Alcohol<br>67-63-0              | EC50: >1000mg/L (96h, Desmodemus subspicatus)<br>EC50: >1000mg/L (72h, Desmodemus subspicatus) | LC50: =9640mg/L (96h, Pimephales promelas)<br>LC50: =11130mg/L (96h, Pimephales promelas)<br>LC50: >1400000µg/L (96h, Lepomis macrochirus) | EC50: =13299mg/L (48h, Daphnia magna) |
| Essential Oil<br>97-53-0                  |  | LC50: =13mg/L (96h, Danio rerio)   |                                       |

|                                   |  |  |                                     |
|-----------------------------------|--|--|-------------------------------------|
| Sodium lauryl sulfate<br>151-21-3 | EC50: =53mg/L (72h, Desmodemus subspicatus)<br>EC50: 30 - 100mg/L (96h, Desmodemus subspicatus)<br>EC50: =117mg/L (96h, Pseudokirchneriella subcapitata)<br>EC50: 3.59 - 15.6mg/L (96h, Pseudokirchneriella subcapitata) | LC50: 15 - 18.9mg/L (96h, Pimephales promelas)<br>LC50: 8 - 12.5mg/L (96h, Pimephales promelas)<br>LC50: 22.1 - 22.8mg/L (96h, Pimephales promelas)<br>LC50: 4.3 - 8.5mg/L (96h, Oncorhynchus mykiss)<br>LC50: =4.62mg/L (96h, Oncorhynchus mykiss)<br>LC50: =4.2mg/L (96h, Oncorhynchus mykiss)<br>LC50: =7.97mg/L (96h, Brachydanio rerio)<br>LC50: 9.9 - 20.1mg/L (96h, Brachydanio rerio)<br>LC50: 4.06 - 5.75mg/L (96h, Lepomis macrochirus)<br>LC50: 4.2 - 4.8mg/L (96h, Lepomis macrochirus)<br>LC50: =4.5mg/L (96h, Lepomis macrochirus)<br>LC50: 5.8 - 7.5mg/L (96h, Pimephales promelas)<br>LC50: 10.2 - 22.5mg/L (96h, Pimephales promelas)<br>LC50: 6.2 - 9.6mg/L (96h, Pimephales promelas)<br>LC50: 13.5 - 18.3mg/L (96h, Poecilia reticulata)<br>LC50: 10.8 - 16.6mg/L (96h, Poecilia reticulata)<br>LC50: =1.31mg/L (96h, Cyprinus carpio) | EC50: =1.8mg/L (48h, Daphnia magna) |
| Oleic Acid<br>112-80-1            |  | LC50: =205mg/L (96h, Pimephales promelas)  |                                     |

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

There is no data for this product.

**Mobility**

| Chemical name                | Partition coefficient |
|------------------------------|-----------------------|
| Isopropyl Alcohol<br>67-63-0 | 0.05                  |

**Other adverse effects**

Not determined

## 13. DISPOSAL CONSIDERATIONS

**Waste Treatment Methods****Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**California Hazardous Waste Status**

| Chemical name                | California Hazardous Waste Status |
|------------------------------|-----------------------------------|
| Isopropyl Alcohol<br>67-63-0 | Toxic<br>Ignitable                |

**14. TRANSPORT INFORMATION**

**Note** Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

**15. REGULATORY INFORMATION****International Inventories**

| Chemical name                 | TSCA | TSCA Inventory Status | DSL/NDSL | EINECS/ELINCS | ENCS | IECSC | KECI | PICCS | AICS |
|-------------------------------|------|-----------------------|----------|---------------|------|-------|------|-------|------|
| Ethyl (S)-2-hydroxypropionate | X    | ACTIVE                | X        | X             | X    |       | X    | X     |      |
| Cottonseed oil                | X    | ACTIVE                | X        | X             |      | X     | X    | X     | X    |
| Isopropyl Alcohol             | X    | ACTIVE                | X        | X             | X    | X     | X    | X     | X    |
| Essential Oil                 | X    | ACTIVE                | X        | X             | X    | X     | X    | X     | X    |
| Clove Oil                     | X    | ACTIVE                | X        |               |      | X     | X    | X     | X    |
| Cornmint Oil                  | X    | ACTIVE                | X        |               |      | X     | X    | X     | X    |
| Cedar Oil                     | X    | ACTIVE                | X        |               |      | X     | X    | X     | X    |
| Thyme Oil                     | X    | ACTIVE                | X        |               |      | X     | X    | X     | X    |
| Cinnamon oil, Ceylon type     | X    | ACTIVE                | X        |               |      | X     | X    | X     | X    |
| Sodium lauryl sulfate         | X    | ACTIVE                | X        | X             | X    | X     | X    | X     | X    |
| Oleic Acid                    | X    | ACTIVE                | X        | X             | X    | X     | X    | X     | X    |
| Triethyl Citrate              | X    | ACTIVE                | X        | X             | X    | X     | X    | X     | X    |
| Monolaurin                    | X    | ACTIVE                | X        | X             | X    | X     | X    | X     | X    |
| Xanthan gum                   | X    | ACTIVE                | X        | X             | X    | X     | X    | X     | X    |
| Sesame oil                    | X    | ACTIVE                | X        | X             |      | X     | X    | X     | X    |

**Legend:**

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

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

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

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

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

**KECI** - Korean Existing Chemicals Inventory

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

**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations****CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).



**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical name               | CAS No  | Weight-% | SARA 313 - Threshold Values % |
|-----------------------------|---------|----------|-------------------------------|
| Isopropyl Alcohol - 67-63-0 | 67-63-0 | 0.1-1    | 1.0                           |

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

| Chemical name                | New Jersey | Massachusetts | Pennsylvania |
|------------------------------|------------|---------------|--------------|
| Isopropyl Alcohol<br>67-63-0 | X          | X             | X            |
| Oleic Acid<br>112-80-1       |            |               | X            |

**16. OTHER INFORMATION****NFPA****Health hazards****Flammability****Instability****Special hazards**

-

-

-

-

**HMIS****Health hazards****Flammability****Physical hazards****Personal Protection**

-

-

-

Not determined

Issue Date: 14-Oct-2024

Revision Date: 18-Oct-2024

Revision Note: New format

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.



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**CONCENTRATE**  
**SDS**



# Zone Out™ Safety Data Sheet

Issue Date: 18-Sep-2024

Revision Date: 28-Mar-2025

Version 2

## 1. IDENTIFICATION

### Product identifier

**Product Name** Zone Out Concentrate

### Other means of identification

**SDS #** NIS-067

**UN/ID No** UN1993

### Recommended use of the chemical and restrictions on use

**Recommended Use** Insecticide.

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

#### **Manufacturer Address**

Nisus Corporation  
100 Nisus Drive  
Rockford, TN 37853

### Emergency telephone number

**Company Phone Number** Phone: (800)-264-0870  
Fax: (865) 577-5825  
**Emergency Telephone** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

**Appearance** Pale yellow liquid

**Physical state** Liquid

**Odor** Clove Cedarwood

### Classification

|                                   |            |
|-----------------------------------|------------|
| Serious eye damage/eye irritation | Category 1 |
| Flammable liquids                 | Category 3 |

### Signal Word

**Danger**

### Hazard statements

Causes serious eye damage  
Flammable liquid and vapor



**Precautionary Statements - Prevention**

Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
Keep container tightly closed  
Ground/bond container and receiving equipment  
Use explosion-proof equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge  
Wear protective gloves/eye protection/face protection

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
Immediately call a POISON CENTER or doctor  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower  
IN CASE OF FIRE: Use CO2, dry chemical, or foam to extinguish

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep cool

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other hazards**

Harmful to aquatic life with long lasting effects

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

| Chemical name                 | CAS No   | Weight-% |
|-------------------------------|----------|----------|
| Ethyl (S)-2-hydroxypropionate | 687-47-8 | 7-13     |
| Isopropyl Alcohol             | 67-63-0  | 3-7      |
| Sodium lauryl sulfate         | 151-21-3 | 0.5-1.5  |

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

**4. FIRST AID MEASURES****Description of first aid measures**

|                     |  |
|---------------------|--|
| <b>Eye Contact</b>  | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician. |
| <b>Skin Contact</b> | Take off immediately all contaminated clothing. Rinse skin with water/shower.  |
| <b>Inhalation</b>   | Remove to fresh air.   |
| <b>Ingestion</b>    | Clean mouth with water and drink afterwards plenty of water.   |

**Most important symptoms and effects, both acute and delayed**

|                 |   |
|-----------------|---|
| <b>Symptoms</b> | May be harmful if swallowed. Causes serious eye damage. |
|-----------------|---|

**Indication of any immediate medical attention and special treatment needed**

|                           |                        |
|---------------------------|------------------------|
| <b>Notes to Physician</b> | Treat symptomatically. |
|---------------------------|------------------------|

## 5. FIRE-FIGHTING MEASURES

### Suitable Extinguishing Media

Use CO<sub>2</sub>, dry chemical, or foam for extinction.

**Unsuitable Extinguishing Media** Not determined.

### Specific Hazards Arising from the Chemical

Flammable liquid and vapor.

### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** Use personal protective equipment as required.

### Environmental precautions

**Environmental precautions** See Section 12 for additional Ecological Information.

### Methods and material for containment and cleaning up

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Clean-Up** Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on Safe Handling** Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion proof equipment. Use only non-sparking tools. Take precautionary measures against static discharges. Wear protective gloves/protective clothing and eye/face protection.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Store in a well-ventilated place. Keep cool.

**Incompatible Materials** None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

| Chemical name                | ACGIH TLV                     | OSHA PEL  | NIOSH IDLH  |
|------------------------------|-------------------------------|---|---|
| Isopropyl Alcohol<br>67-63-0 | STEL: 400 ppm<br>TWA: 200 ppm | TWA: 400 ppm<br>TWA: 980 mg/m <sup>3</sup><br>(vacated) TWA: 400 ppm<br>(vacated) TWA: 980 mg/m <sup>3</sup><br>(vacated) STEL: 500 ppm<br>(vacated) STEL: 1225 mg/m <sup>3</sup> | IDLH: 2000 ppm<br>TWA: 400 ppm<br>TWA: 980 mg/m <sup>3</sup><br>STEL: 500 ppm<br>STEL: 1225 mg/m <sup>3</sup> |

**Appropriate engineering controls**

**Engineering Controls** Apply technical measures to comply with the occupational exposure limits.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Refer to 29 CFR 1910.133 for eye and face protection regulations.

**Skin and Body Protection** Refer to 29 CFR 1910.138 for appropriate skin and body protection.

**Respiratory Protection** Refer to 29 CFR 1910.134 for respiratory protection requirements.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

|  |                      |                                |                 |
|--|----------------------|--------------------------------|-----------------|
| <b>Physical state</b>                          | Liquid               | <b>Odor</b>                    | Clove Cedarwood |
| <b>Appearance</b>                              | Pale yellow liquid   | <b>Odor Threshold</b>          | Not determined  |
| <b>Color</b>                                   | Pale yellow          |                                |                 |
| <b><u>Property</u></b>                         | <b><u>Values</u></b> | <b><u>Remarks • Method</u></b> |                 |
| <b>pH</b>                                      | 2.5-4.5              |                                |                 |
| <b>Melting point / freezing point</b>          | No data available    |                                |                 |
| <b>Initial boiling point and boiling range</b> | No data available    |                                |                 |
| <b>Flash point</b>                             | 43 °C / 109.4 °F     | CC (closed cup)                |                 |
| <b>Evaporation Rate</b>                        | Not determined       |                                |                 |
| <b>Flammability (Solid, Gas)</b>               | Not determined       |                                |                 |
| <b>Flammability Limit in Air</b>               |                      |                                |                 |
| <b>Upper flammability or explosive limits</b>  | No data available    |                                |                 |
| <b>Lower flammability or explosive limits</b>  | No data available    |                                |                 |
| <b>Vapor Pressure</b>                          | Not determined       |                                |                 |
| <b>Vapor Density</b>                           | No data available    |                                |                 |
| <b>Relative Density</b>                        | 8.12-8.14            |                                |                 |
| <b>Water Solubility</b>                        | Soluble in water     |                                |                 |
| <b>Solubility in other solvents</b>            | Not determined       |                                |                 |
| <b>Partition Coefficient</b>                   | Not determined       |                                |                 |
| <b>Autoignition temperature</b>                | No data available    |                                |                 |
| <b>Decomposition temperature</b>               | Not determined       |                                |                 |
| <b>Kinematic viscosity</b>                     | Not determined       |                                |                 |
| <b>Dynamic Viscosity</b>                       | Not determined       |                                |                 |
| <b>Explosive Properties</b>                    | Not determined       |                                |                 |
| <b>Oxidizing Properties</b>                    | Not determined       |                                |                 |

## 10. STABILITY AND REACTIVITY

**Reactivity**

Not reactive under normal conditions.

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

None under normal processing.

**Conditions to Avoid**

Keep out of reach of children.

**Incompatible materials**

None known based on information supplied.

**Hazardous decomposition products**

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure****Product Information**

**Eye Contact** Avoid contact with eyes.

**Skin Contact** Avoid contact with skin.

**Inhalation** Do not inhale.

**Ingestion** May be harmful if swallowed.

**Component Information**

| Chemical name                             | Oral LD50             | Dermal LD50             | Inhalation LC50                      |
|---|-----------------------|-------------------------|--------------------------------------|
| Ethyl (S)-2-hydroxypropionate<br>687-47-8 | > 2000 mg/kg ( Rat )  | -                       | > 5.4 mg/L ( Rat ) 4 h               |
| Cottonseed oil<br>8001-29-4               | > 90 mL/kg ( Rat )    | -                       | -                                    |
| Isopropyl Alcohol<br>67-63-0              | = 1870 mg/kg ( Rat )  | = 4059 mg/kg ( Rabbit ) | > 10000 ppm ( Rat ) 6 h              |
| Essential Oil<br>97-53-0                  | = 1930 mg/kg ( Rat )  | -                       | -                                    |
| Clove Oil<br>8000-34-8                    | = 1370 mg/kg ( Rat )  | = 1200 mg/kg ( Rabbit ) | -                                    |
| Cornmint Oil<br>68917-18-0                | = 1240 mg/kg ( Rat )  | -                       | -                                    |
| Thyme Oil<br>8007-46-3                    | = 2840 mg/kg ( Rat )  | -                       | -                                    |
| Cinnamon oil, Ceylon type<br>8015-91-6    | = 2650 mg/kg ( Rat )  | = 702 mg/kg ( Rabbit )  | -                                    |
| Sodium lauryl sulfate<br>151-21-3         | = 1288 mg/kg ( Rat )  | = 200 mg/kg ( Rabbit )  | > 3900 mg/m <sup>3</sup> ( Rat ) 1 h |
| Sesame oil<br>8008-74-0                   | -                     | > 2 g/kg ( Rabbit )     | -                                    |
| Oleic Acid<br>112-80-1                    | = 25 g/kg ( Rat )     | -                       | -                                    |
| Triethyl Citrate<br>77-93-0               | = 5900 mg/kg ( Rat )  | > 5 g/kg ( Rabbit )     | = 1300 ppm ( Rat ) 6 h               |
| Monolaurin<br>142-18-7                    | = 53400 µL/kg ( Rat ) | -                       | -                                    |

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

**Symptoms** Please see section 4 of this SDS for symptoms.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Serious eye damage/eye irritation**

Causes severe eye damage.

**Carcinogenicity**

Group 3 IARC components are "not classifiable as human carcinogens".

| Chemical name                | ACGIH | IARC    | NTP | OSHA |
|------------------------------|-------|---------|-----|------|
| Isopropyl Alcohol<br>67-63-0 |       | Group 3 |     | X    |
| Essential Oil<br>97-53-0     |       | Group 3 |     |      |

**Legend***IARC (International Agency for Research on Cancer)**Group 3 IARC components are "not classifiable as human carcinogens"**Occupational Safety and Health Administration of the US Department of Labor**X - Present***Numerical measures of toxicity**

The following values are calculated based on chapter 3.1 of the GHS document

**Oral LD50** 4,880.10 mg/kg**Dermal LD50** 7,294.70 mg/kg**ATEmix (inhalation-dust/mist)** 33.80 mg/l**ATEmix (inhalation-vapor)** 283.40 mg/l**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Harmful to aquatic life with long lasting effects.

**Component Information**

| Chemical name                             | Algae/aquatic plants   | Fish   | Crustacea                             |
|---|--|--|---------------------------------------|
| Ethyl (S)-2-hydroxypropionate<br>687-47-8 |  | LC50: =320mg/L (96h, Brachydanio rerio)  | EC50: =683mg/L (48h, Daphnia magna)   |
| Isopropyl Alcohol<br>67-63-0              | EC50: >1000mg/L (96h, Desmodesmus subspicatus)<br>EC50: >1000mg/L (72h, Desmodesmus subspicatus)   | LC50: =9640mg/L (96h, Pimephales promelas)<br>LC50: =11130mg/L (96h, Pimephales promelas)<br>LC50: >1400000µg/L (96h, Lepomis macrochirus)   | EC50: =13299mg/L (48h, Daphnia magna) |
| Essential Oil<br>97-53-0                  |  | LC50: =13mg/L (96h, Danio rerio)   |                                       |
| Sodium lauryl sulfate<br>151-21-3         | EC50: =53mg/L (72h, Desmodesmus subspicatus)<br>EC50: 30 - 100mg/L (96h, Desmodesmus subspicatus)<br>EC50: =117mg/L (96h, Pseudokirchneriella subcapitata)<br>EC50: 3.59 - 15.6mg/L (96h, Pseudokirchneriella subcapitata) | LC50: 15 - 18.9mg/L (96h, Pimephales promelas)<br>LC50: 8 - 12.5mg/L (96h, Pimephales promelas)<br>LC50: 22.1 - 22.8mg/L (96h, Pimephales promelas)<br>LC50: 4.3 - 8.5mg/L (96h, Oncorhynchus mykiss)<br>LC50: =4.62mg/L (96h, Oncorhynchus mykiss)<br>LC50: =4.2mg/L (96h, Oncorhynchus mykiss)<br>LC50: =7.97mg/L (96h, Brachydanio rerio)<br>LC50: 9.9 - 20.1mg/L (96h, Brachydanio rerio)<br>LC50: 4.06 - 5.75mg/L (96h, Lepomis macrochirus)<br>LC50: 4.2 - 4.8mg/L (96h, Lepomis | EC50: =1.8mg/L (48h, Daphnia magna)   |



|                        |  |   |  |
|------------------------|--|---|--|
|                        |  | macrochirus)<br>LC50: =4.5mg/L (96h, Lepomis macrochirus)<br>LC50: 5.8 - 7.5mg/L (96h, Pimephales promelas)<br>LC50: 10.2 - 22.5mg/L (96h, Pimephales promelas)<br>LC50: 6.2 - 9.6mg/L (96h, Pimephales promelas)<br>LC50: 13.5 - 18.3mg/L (96h, Poecilia reticulata)<br>LC50: 10.8 - 16.6mg/L (96h, Poecilia reticulata)<br>LC50: =1.31mg/L (96h, Cyprinus carpio) |  |
| Oleic Acid<br>112-80-1 |  | LC50: =205mg/L (96h, Pimephales promelas)   |  |

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

There is no data for this product.

**Mobility**

| Chemical name                             | Partition coefficient |
|---|-----------------------|
| Ethyl (S)-2-hydroxypropionate<br>687-47-8 | 0.06                  |
| Isopropyl Alcohol<br>67-63-0              | 0.05                  |
| Sodium lauryl sulfate<br>151-21-3         | 1.6                   |

**Other adverse effects**

Not determined

### 13. DISPOSAL CONSIDERATIONS

**Waste Treatment Methods****Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**California Hazardous Waste Status**

| Chemical name                | California Hazardous Waste Status |
|------------------------------|-----------------------------------|
| Isopropyl Alcohol<br>67-63-0 | Toxic<br>Ignitable                |

### 14. TRANSPORT INFORMATION

**Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT**

NOT REGULATED if shipped in NON BULK packaging (single containers less than 119 gal/ 882 lbs) by ground transport.

BULK Packaging (single containers larger than 119 gal/ 882 lbs):

**UN/ID No** UN1993  
**Proper Shipping Name** Flammable liquid, n.o.s. (Isopropanol)  
**Transport hazard class(es)** 3  
**Packing Group** III

**IATA**

**UN number or ID number** UN1993  
**Proper Shipping Name** Flammable liquid, n.o.s. (Isopropanol)  
**Transport hazard class(es)** 3  
**Packing group** III

**IMDG**

**UN number or ID number** UN1993  
**Proper Shipping Name** Flammable liquid, n.o.s. (Isopropanol)  
**Transport hazard class(es)** 3  
**Packing Group** III

## 15. REGULATORY INFORMATION

**International Inventories**

| Chemical name                 | TSCA | TSCA Inventory Status | DSL/NDSL | EINECS/ELI NCS | ENCS | IECSC | KECI | PICCS | AIIIC |
|-------------------------------|------|-----------------------|----------|----------------|------|-------|------|-------|-------|
| Ethyl (S)-2-hydroxypropionate | X    | ACTIVE                | X        | X              | X    |       | X    | X     |       |
| Cottonseed oil                | X    | ACTIVE                | X        | X              |      | X     | X    | X     | X     |
| Isopropyl Alcohol             | X    | ACTIVE                | X        | X              | X    | X     | X    | X     | X     |
| Essential Oil                 | X    | ACTIVE                | X        | X              | X    | X     | X    | X     | X     |
| Clove Oil                     | X    | ACTIVE                | X        |                |      | X     | X    | X     | X     |
| Cornmint Oil                  | X    | ACTIVE                | X        |                |      | X     | X    | X     | X     |
| Cedar Oil                     | X    | ACTIVE                | X        |                |      | X     | X    | X     | X     |
| Thyme Oil                     | X    | ACTIVE                | X        |                |      | X     | X    | X     | X     |
| Cinnamon oil, Ceylon type     | X    | ACTIVE                | X        |                |      | X     | X    | X     | X     |
| Sodium lauryl sulfate         | X    | ACTIVE                | X        | X              | X    | X     | X    | X     | X     |
| Sesame oil                    | X    | ACTIVE                | X        | X              |      | X     | X    | X     | X     |
| Oleic Acid                    | X    | ACTIVE                | X        | X              | X    | X     | X    | X     | X     |
| Triethyl Citrate              | X    | ACTIVE                | X        | X              | X    | X     | X    | X     | X     |
| Monolaurin                    | X    | ACTIVE                | X        | X              | X    | X     | X    | X     | X     |
| Xanthan gum                   | X    | ACTIVE                | X        | X              | X    | X     | X    | X     | X     |

**Legend:**

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

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

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

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

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

**KECL** - Korean Existing Chemicals Inventory

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

**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations****CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

**SARA 313**

| Chemical name               | CAS No  | Weight-% | SARA 313 - Threshold Values % |
|-----------------------------|---------|----------|-------------------------------|
| Isopropyl Alcohol - 67-63-0 | 67-63-0 | 3-7      | 1.0                           |

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

| Chemical name                | New Jersey | Massachusetts | Pennsylvania |
|------------------------------|------------|---------------|--------------|
| Cottonseed oil<br>8001-29-4  |            |               | X            |
| Isopropyl Alcohol<br>67-63-0 | X          | X             | X            |
| Oleic Acid<br>112-80-1       |            |               | X            |

**16. OTHER INFORMATION**

|             |                       |                     |                         |                            |
|-------------|-----------------------|---------------------|-------------------------|----------------------------|
| <b>NFPA</b> | <b>Health hazards</b> | <b>Flammability</b> | <b>Instability</b>      | <b>Special hazards</b>     |
|             | -                     | -                   | -                       | -                          |
| <b>HMIS</b> | <b>Health hazards</b> | <b>Flammability</b> | <b>Physical hazards</b> | <b>Personal Protection</b> |
|             | -                     | -                   | -                       | Not determined             |

**Issue Date:** 18-Sep-2024  
**Revision Date:** 27-Mar-2025  
**Revision Note:** Transportation update

**Disclaimer**

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