Section 1 - Identification

Product Identifier: SUN-SPRAY Ready to Use Foaming Citrus Degreaser (Qt.)
Other means of identification: 1086
Recommended use: R-T-U Degreaser.
Recommended restrictions: For commercial and industrial use only.

Manufacturer / Importer / Supplier / Distributor Information
Company Name: National Chemical Laboratories of PA, Inc.
Address: 401 N. 10th Street - Philadelphia, PA 19123
Telephone: 1 (215) 922-1200
Supplier Email: info@nclonline.com
Contact: CHEM-TEL
Emergency Phone: 1 (800) 255-3924

Section 2 - Hazard(s) Identification

SDS Hazards and Warnings are based on the undiluted product. Refer to diluted SDS for Ready-To-Use Hazards and Warnings.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Hazards</td>
<td>Not Classified</td>
</tr>
<tr>
<td>Health Hazards</td>
<td>1</td>
</tr>
<tr>
<td>Sensitization, skin</td>
<td>2A</td>
</tr>
</tbody>
</table>

OSHA defined hazards: Not Classified.

Signal Word: Warning

Hazard Statement: May cause an allergic skin reaction. Causes serious eye irritation.

Precautionary statement:

Prevention: Avoid breathing mist or vapor. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves. Wear eye/face protection.

Response:

If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Specific treatment (see this label). If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Wash contaminated clothing before reuse.

Storage: Store away from incompatible materials.

Disposal: Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC): None known.

Section 3 - Composition/Information on ingredients

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS #</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Nonylphenol, branched, ethoxylated</td>
<td>127087-87-0</td>
<td>1 - 5</td>
</tr>
<tr>
<td>2-(2-Butoxyethoxy) Ethanol</td>
<td>112-34-5</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Orange Oil</td>
<td>8008-57-9</td>
<td>0.1 - 1</td>
</tr>
<tr>
<td>Citrus Terpenes</td>
<td>5989-27-5</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>

Section 4 - First-aid Measures

Inhalation: Move to fresh air. Get medical attention if irritation persists.

Skin contact: Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Get medical attention if irritation develops or persists.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
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**Section 5 - Fire-fighting measures**

**Suitable extinguishing media**
This product is non-combustible. Use fire-extinguishing media appropriate for surrounding materials. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

**Unsuitable extinguishing media**
Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical**
During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire-fighting equipment/instructions**
Move containers from fire area if you can do it without risk.

**General fire hazards**
No unusual fire or explosion hazards noted.

**Section 6 - Accidental release measures**

**Personal precautions, protective equipment and emergency procedures.**
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up**
This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Avoid discharge into drains, water courses or onto the ground.

**Environmental precautions**
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. For personal protection, see section 8 of the SDS.

**Section 7 - Handling and storage**

**Precautions for safe handling**
Do not get in eyes, on skin, or on clothing. Avoid breathing mist or vapor. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**
Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

**Section 8 - Exposure control/personal protection**

**Occupational exposure limits**

**US. Workplace environmental Exposure Level (WEEL) Guides**

<table>
<thead>
<tr>
<th>Component</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citrus Terpenes (CAS 5989-27-5)</td>
<td>TWA</td>
<td>165.5 mg/m³, 30 ppm</td>
</tr>
</tbody>
</table>

**US. ACGIH Threshold Limit Values**

<table>
<thead>
<tr>
<th>Component</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)</td>
<td>TWA</td>
<td>10 ppm</td>
<td>Inhalable fraction and vapor.</td>
</tr>
</tbody>
</table>

**Biological limit values**
No biological exposure limits noted for the ingredient(s).

**Exposure guidelines**
Use personal protective equipment as required. Keep working clothes separately.

**Appropriate engineering controls**
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

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

**Eye/face protection**
If use of product risks exposure to contact, wear safety glasses with side shields.

**Skin protection**

**Hand protection**
Impervious gloves are recommended for prolonged use.

**Other**
If use of product risk exposure to contact, wear suitable protective clothing.
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General hygiene considerations
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Section 9 - Physical and chemical properties

Appearance
- Physical state: Liquid.
- Form: Liquid.
- Color: Straw.
- Odor: Orange peel.
- Odor threshold: Not available.
- Melting point/freezing point: Not available.
- Initial boiling point and boiling range: 212 °F (100 °C)
- Flash point: > 212.0 °F (> 100.0 °C) Tag Closed Cup
- Evaporation rate: Not available.
- Flammability (solid, gas): Not applicable.
- Upper/lower flammability or explosive limits:
  - Flammability limit - lower (%): Not available.
  - Flammability limit - upper (%): Not available.
  - Explosive limit - lower (%): Not available.
  - Explosive limit - upper (%): Not available.
- Vapor pressure: Not available.
- Vapor density: Similar to water.
- Relative density: 1.01 ± 0.01
- Relative density temperature: 75 °F (23.9 °C)
- Solubilities (water): 100% Completely soluble.
- Partition Coefficient n-octanol/water: Not available
- Auto-ignition temperature: Not Available
- Decomposition temperature: Not Available
- Viscosity: < 20 cSt
- Viscosity Temperature: 75 °F (23.9 °C)

Section 10 - Stability and reactivity

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability: Material is stable under normal conditions.
Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.
Conditions to Avoid: Contact with incompatible materials.
Incompatible materials: Strong oxidizing agents.
Hazardous Decomposition Products: No hazardous decomposition products are known.

Section 11 - Toxicological information

Information on likely routes of exposure
- Ingestion: Expected to be a low ingestion hazard.
- Inhalation: Prolonged inhalation may be harmful.
- Skin contact: May cause an allergic skin reaction.
- Eye contact: Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics: Rash. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Dermatitis.

Information on toxicological effects
- Acute toxicity: Not expected to be acutely toxic. May cause an allergic skin reaction.

Components
- 2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5): Acute Dermal LD50 Rabbit 2764 mg/kg, (Male)
- Citrus Terpenes (CAS 5989-27-5): Acute Dermal LD50 Rabbit 5 g/kg
- Acute Oral LD50 Mouse 5600 - 6600 mg/kg
- Acute Other LD50 Mouse 1.3 g/kg
**SAFETY DATA SHEET**

**Skin corrosion/irritation**
- Prolonged skin contact may cause temporary irritation.

**Serious eye damage/ eye irritation**
- Causes serious eye irritation.

**Respiratory sensitization**
- This product is not expected to cause respiratory sensitization.

**Skin sensitization**
- May cause an allergic skin reaction.

**Germ cell mutagenicity**
- No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**
- This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

### IARC Monographs. Overall Evaluation of Carcinogenicity

<table>
<thead>
<tr>
<th>Component</th>
<th>Result</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citrus Terpenes (CAS 5989-27-5)</td>
<td>3</td>
<td>Not classifiable as to carcinogenicity to humans.</td>
</tr>
</tbody>
</table>

**Reproductive toxicity**
- This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure**
- Not classified.

**Specific target organ toxicity - repeated exposure**
- Not classified.

**Aspiration hazard**
- Not classified.

**Chronic effects**
- May be harmful if absorbed through skin. Prolonged inhalation may be harmful.

**Further information**
- No other specific acute or chronic health impact noted.

### Section 12 - Ecological Information

**Ecotoxicity**
- The product contains a substance which is very toxic to aquatic organisms.

**Component(s)**
- Citrus Terpenes, 5989-27-5

#### Aquatic

<table>
<thead>
<tr>
<th>Level</th>
<th>Type</th>
<th>Code</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
<td>Crustacea</td>
<td>EC50</td>
<td>Water flea (Daphnia pulex)</td>
<td>69.6 mg/l, 48 hours</td>
</tr>
<tr>
<td></td>
<td>Fish</td>
<td>LC50</td>
<td>Flathead minnow (Pimephales promelas)</td>
<td>0.619 - 0.796 mg/l, 96 hours</td>
</tr>
<tr>
<td>4-Nonylphenol, branched, ethoxylated, 127087-87-0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Aquatic

<table>
<thead>
<tr>
<th>Level</th>
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<th>Code</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
<td>Crustacea</td>
<td>EC50</td>
<td>Water flea (Daphnia magna)</td>
<td>12.2 mg/l, 48 hours</td>
</tr>
<tr>
<td></td>
<td>Fish</td>
<td>LC50</td>
<td>Bluegill (lepomis macrochirus)</td>
<td>1 - 1.8 mg/l 96 hours</td>
</tr>
</tbody>
</table>

**Persistence and degradability**
- No data is available on the degradability of this product.

**Bioaccumulative potential**
- No data available.

**Partition coefficient n-octanol / water log (Kow)**

<table>
<thead>
<tr>
<th>Components</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)</td>
<td>0.56</td>
</tr>
<tr>
<td>4-Nonylphenol, branched, ethoxylated (CAS 127087-87-0)</td>
<td>2.1 - 3.4 (Calculated)</td>
</tr>
<tr>
<td>Citrus Terpenes (CAS 5989-27-5)</td>
<td>4.232</td>
</tr>
</tbody>
</table>

**Mobility in soil**
- No data available.

**Other adverse effects**
- No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### Section 13 - Disposal considerations

**Disposal instructions**
- Dispose in accordance with applicable federal, state, and local regulations.

**Local disposal regulations**
- Dispose of in accordance with local regulations.

**Hazardous waste code**
- Waste codes should be assigned by the user based on the application for which the product was used.

**Waste from residues / unused products**
- Dispose in accordance with all applicable regulations.

**Contaminated packaging**
- Since emptied containers may retain product residue, follow label warnings even after container is emptied.

### Section 14 - Transport information

**DOT**
- Not regulated as dangerous goods.

**IATA**
- Not regulated as dangerous goods.

**IMDG**
- Not regulated as dangerous goods.

**Transportation in bulk according to Annex II of MARPOL 73/78 and IBC Code**
- This substance/mixture is not intended to be transported in bulk.
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US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR707, Subpt. D) Not regulated.


CERCLA Hazardous Substance List (40 CFR 302.4)

Components Result
2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5) LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard Categories
Immediate Hazard Yes
Delayed Hazard No
Fire Hazard Yes
Pressure Hazard No
Reactivity Hazard No

SARA 302 Extremely hazardous substance Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS #</th>
<th>% by wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-Butoxyethoxy) Ethanol</td>
<td>112-34-5</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HSPs) List

Components
2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Components
2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)

US. New Jersey Worker and Community Right-to-Know Act

Components
2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)
Citrus Terpenes (CAS 5989-27-5)

US.Pennsylvania RTK - Hazardous Substances

Components
2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)

US. Rhode Island RTK

Components
2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)

US - California Proposition 65

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory Name</th>
<th>On Inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances</td>
<td>Yes</td>
</tr>
<tr>
<td>United States</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

*A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Section 16 - Other information, including date of preparation or last version

Revision date 1/17/2018
Version # 02
Further information Not available.

SUN-SPRAY Ready to Use Foaming Citrus Degreaser (Qt.) 1086 Page 5 of 6
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