



# SAFETY DATA SHEET

## 266 Citrol® (Bulk)

### Section 1. Identification

<b>GHS product identifier</b>	: 266 Citrol® (Bulk)
<b>Other means of Identification</b>	: Not available
<b>Product type</b>	: Liquid
<b>Identified uses</b>	: Citrus based water soluble degreaser.
<b>Supplier's details</b>	: Schaeffer Mfg. Company 102 Barton Street Saint Louis, Missouri 63104 Tel: 314-865-4100 Fax: 314-865-4107 Toll Free: 1-800-325-9962 E-Mail: <a href="mailto:safety@schaefferoil.com">safety@schaefferoil.com</a> Web: <a href="http://www.schaefferoil.com">http://www.schaefferoil.com</a>
<b>Emergency Phone Number (with hours of operation)</b>	: +1 314 865-4105 (24-hour response number)

### Section 2. Hazards identification

<b>OSHA/HCS status</b>	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
<b>Classification of the substance or mixture</b>	: FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1
<b>GHS label elements</b>	
<b>Hazard pictograms :</b>	



## Section 2. Hazards identification

**Signal word** : Warning

**Hazard statements** : Flammable liquid and vapor.  
Harmful if swallowed or in contact with skin.  
Causes serious eye irritation.  
Causes skin irritation.  
May cause an allergic skin reaction.  
Suspected of causing cancer.  
May cause damage to organs through prolonged or repeated exposure.  
Very toxic to aquatic life with long lasting effects.

### Precautionary statements

**General** : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

**Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Avoid release to the environment. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

**Response** : Collect spillage. Get medical attention if you feel unwell. If exposed or or concerned: Get medical attention. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash with plenty of soap and water. Call a POSION CENTER or physician if you feel unwell. Take off contaminated clothing. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do, Continue rinsing. If eye irritation persists: Get medical attention.

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

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise Classified** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture:** Mixture

Ingredient name	%	CAS number
Terpene hydrocarbons	30-60	68956-56-9
Citrus, ext.	10-30	94266-47-4
2-Butoxyethanol	10-30	111-76-2
Amides, coco, N,N-bis(hydroxyethyl)	5-10	68603-42-9
Nonylphenol, ethoxylated	1-5	9016-45-9
Diethanolamine	1-5	111-42-2
Dodecyldimethylamine oxide	0.1-1	1643-20-5

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

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8.**

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Wash with plenty of soap and water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. If necessary, call a poison center or physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as collar, tie, belt or waistband.

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

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : Harmful in contact with skin. Causes skin irritation. May cause allergic skin reaction.
- Ingestion** : Harmful if swallowed. Irritating to mouth, throat and stomach.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
Pain or irritation  
Watering  
Redness
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Adverse symptoms may include the following:  
Irritation  
Redness

## Section 4. First aid measures

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

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

**Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be need to be kept under medical surveillance for 48 hours.

**Specific treatments** : No specific treatment.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. 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>, or spray (fog) or foam.

**Unsuitable extinguishing media** : Do not use water jet or water-based fire extinguishers.

**Specific hazards arising from the chemical** : Flammable liquid and vapor. 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. Runoff to sewer may create fire or explosion hazard. This material is very toxic 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  
Nitrogen oxides

**Special protective actions for fire-fighters** : 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.

## Section 6. Accidental release measures

**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 of soil, waterways, drains and sewers. U.S.A. regulations may require reporting spills to all applicable Federal, State, Provincial and local authorities and/or the United States National Response Center at (800) 424-8802 as appropriate or required. Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

### 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. Absorb with 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. 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). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure – obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. 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. See also Section 8 for additional information on hygiene measures. Remove contaminated clothing and protective equipment before entering eating areas.

## Section 7. Handling and Storage

**Conditions for safe storage including any incompatibilities** : 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. 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.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limit

Ingredient name	Exposure limits
2-Butoxyethanol	<b>ACGIH TLV (United States, 4/2014).</b> TWA: 20 ppm 8 hours. <b>NIOSH REL (United States, 10/2013). Absorbed through skin.</b> TWA: 24 mg/m <sup>3</sup> 10 hours. TWA: 5 ppm 10 hours. <b>OSHA PEL (United States, 2/2013.) Absorbed through skin.</b> TWA: 240 mg/m <sup>3</sup> 8 hours. TWA: 50 ppm 8 hours.
Diethanolamine	<b>ACGIH TLV (United States, 6/2013.) Absorbed through skin.</b> TWA: 1 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction and vapor <b>NIOSH REL (United States, 4/2013.)</b> TWA: 15 mg/m <sup>3</sup> 10 hours. TWA: 3 ppm 10 hours <b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 15 mg/m <sup>3</sup> 8 hours. TWA: 3 ppm 8 hours.

**Appropriate engineering controls** : 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.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

## Section 8. Exposure controls/personal protection

- Eye/face protection** : Wear eye protection such as safety glasses, chemical goggles, or face shields if engineering controls or work practices are not adequate to prevent eye contact.
- Skin Protection**  
**Hand protection** : Use nitrile or oil resistant gloves.
- Body protection** : Personal protective clothing such as gloves, aprons, boots and complete facial protection should be selected based on the task being performed and the risks involved. Users should determine acceptable performance characteristics of protective clothing. Consider physical requirements and other substances present when selecting protective clothing.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved.
- Respiratory protection** : If a risk assessment indicates that respiratory protection is required, use a properly fitted, air-purifying or supplied air respirator that complies with an approved standard. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

- Appearance**
- Physical state** : Liquid. [Clear.]
- Color** : Light yellow to orange
- Odor** : Citrus
- Odor threshold** : Not available
- pH** : 9 to 10 [Conc. (% w/w): 1%]
- Melting point/Dropping Point** : Not available
- Boiling Point** : 97°C (206.6°F)
- Flash point** : Closed cup: 56.6°C (134°F)
- Evaporation point** : Not available.
- Flammability (solid, gas)** : Not available
- Lower and upper explosive (flammable) limits** : Not available
- Vapor pressure** : 2.3 kPa (17.5mm Hg) [room temperature]
- Vapor density** : >1 [Air=1]
- Relative density** : 0.9366
- Solubility** : Emulsifiable.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available
- Decomposition temperature** : Not available
- Viscosity** : Not applicable.
- Volatility** : Not available.
- VOC content** : 36%

## 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.



## Section 10. Stability and reactivity

**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 or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

**Incompatible materials** : Reactive or incompatible with the following materials: Strong acids, reducing agents and oxidizers.

**Hazardous decomposition products** : Carbon monoxide, carbon dioxide, aldehydes, ketones.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-Butoxyethano	LC50 Inhalation Vapor	Rat	450 ppm	4 hours
	LD50 Dermal	Rabbit	220 mg/kg	-
	LD50 Oral	Rat	250 mg/kg	-
Terpene hydrocarbons	LC50 Inhalation Vapor	Mouse	>5000 mg/m <sup>3</sup>	-
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

#### Irritation/Corrosion

Product/ingredient	Result	Species	Score	Exposure	Observation
2-Butoxyethanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Severe irritant	Rabbit	-	100 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
Amides,coco,N,Nbis(hydroxyethyl)	Eyes - Severe irritant	Rabbit	-	100 µL	-
	Skin - Moderate irritant	Rabbit	-	300 µL	-
Nonylphenol, ethoxylated	Eyes - Severe irritant	Guinea pig	-	20 mg	-
	Eyes - Severe irritant	Mouse	-	20 mg	-
	Eyes - Severe irritant	Rabbit	-	20 mg	-
	Skin - Mild irritant	Human	-	72 hours 15 mg Intermittent	-
Diethanolamine	Skin - Mild irritant	Rabbit	-	500 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 750 µg	-
	Eyes - Severe irritant	Rabbit	-	5500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	50 mg	-
Dodecyldimethylamine oxide	Eyes - Severe irritant	Rabbit	-	1%	-
	Skin - Severe irritant	Rabbit	-	24 hours 2 mg	-
	Skin - Mild irritant	Human	-	48 hours 3.7%	-

#### Sensitization

There is no data available.



## Section 11. Toxicological information

### Carcinogenicity Classification

Product/Ingredient name	OSHA	IARC	NTP	ACGIH	EPA	NIOSH
Terpene hydrocarbons	-	3	-	-	-	-
2-Butoxyethanol	-	3	-	A3	-	-
Amides, coco, N,N-bis(hydroxyethyl)	-	2B	-	-	-	-
Diethanolamine	-	2B	-	A3	-	None.

### Specific target organ toxicity (single exposure)

There is no data available.

### Specific target organ toxicity (repeated exposure)

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

### Aspiration hazard

Name	Result
Terpene hydrocarbon	ASPIRATION HAZARD – Category 1
Citrus, ext	ASPIRATION HAZARD – Category 1

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

### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Exposure to decomposition products that may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : Harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : Harmful if swallowed. Irritating to mouth throat and stomach.

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

- Eye contact** : Adverse symptoms may include the following:  
Pain or irritation  
Watering  
Redness
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Adverse symptoms may include the following:  
Irritation  
Redness
- Ingestion** : No known significant effects or critical hazards.

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

#### Short term exposure

**Potential immediate effects** : No known significant effects or critical hazards.

**Potential delayed effects** : No known significant effects or critical hazards.

#### Long term exposure

**Potential immediate effects** : No known significant effects or critical hazards.

## Section 11. Toxicological information

**Potential delayed effects** : No known significant effects or critical hazards.

### Potential chronic health effects

**General** : May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

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

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

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

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

### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE Value
Oral	1753.9 mg/kg
Dermal	1695.7 mg/kg
Inhalation (vapors)	84.78 mg/L

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
2-Butoxyethanol	Acute EC50 >1000 mg/L Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1000 mg/L Marine water	Crustaceans - Chaetogammarus marinus -Young	48 hours
Nonylphenol, ethoxylated	Acute LC50 1250000 µg/L Marine water	Fish - Menidia beryllina	96 hours
	Acute EC50 12 mg/L Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute LC50 1.23 mg/L Marine water	Crustaceans - Americamysis bahia	48 hours
	Acute LC50 0.148 mg/L Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 4700 µg/L Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 8 mg/L Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Chronic NOEC 35 mg/L Fresh water	Fish - Oryzias latipes - Fry	100 days
	Acute EC50 12 mg/L Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
Diethanolamine	Acute LC50 2150 µg/L Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 100 mg/L Fresh water	Daphnia - Daphnia pulex Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
Terpene hydrocarbons	Acute LC50 0.72 mg/L	Pimephales promelas (Feathered minnow)	96 hours
	Acute EC50 69.6 mg/L	Daphnia pulex (Water flea)	48 hours

### Persistence and degradability

Product /ingredient name	Aquatic half-life	Photolysis	Biodegradability
Terpene hydrocarbons	-	-	Readily
Citrus, ext.	-	-	Readily

### Bioaccumulative potential

Product/ingredient name	LogP ow	BCF	Potential
2-Butoxyethanol	0.81	-	Low
Diethanolamine	-1.43	-	Low

## Section 12. Ecological information

### 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 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 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 empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some 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. Transportation information

	DOT Classification	IMDG	IATA
<b>UN Number</b>	UN1993	UN1993	UN1993
<b>UN Proper shipping name</b>	FLAMMABLE LIQUIDS, N.O.S. (Terpene hydrocarbons, 2-Butoxyethanol). Marine pollutant (Terpene hydrocarbons., Nonylphenol, ethoxylated) RQ (Diethanolamine)	FLAMMABLE LIQUIDS, N.O.S. (Terpene hydrocarbons, 2-Butoxyethanol). Marine pollutant (Terpene hydrocarbons, Nonylphenol, ethoxylated)	FLAMMABLE LIQUIDS, N.O.S. (Terpene hydrocarbons, 2-Butoxyethanol)
<b>Transport hazard class(es)</b>	3  	3  	3 
<b>Packing group</b>	III	III	III
<b>Environmental hazards</b>	No.	Yes.	NO.
<b>Additional Information</b>	<p>This product may be re-classified as "Combustible Liquid," unless transported by vessel or aircraft. Non-bulk packages (less than or equal to 119 gal) of combustible liquids, that are marine pollutants, are not regulated as hazardous materials in package sizes less than the product reportable quantity, unless transported by vessel.</p> <p>The marine pollutant mark is not required when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes.</p> <p><b>Reportable quantity</b> 3898.6 lbs / 1770 kg [499.23 gal / 1889.8 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.</p>	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.	The environmentally hazardous substance mark may appear if required by other transportation regulations.

## Section 14. Transportation information

- AERG** : 128
- DOT –RQ Details** : Diethanolamine 100 lbs / 45.4 kg
- Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
- Transport in bulk according to Annex II or MARPOL 73/78 and the IBC Code** : Not available.

## Section 15. Regulatory information

- U.S. Federal regulations** : **TSCA 8(a) PAIR:** Nonylphenol, ethoxylated  
**TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**United States inventory (TSCA 8b):** All components are listed or exempted.

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

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

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

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

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

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

#### Classification

: Fire hazard  
 Immediate (acute) health hazard  
 Delayed (chronic) health hazard

#### Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Citrus, ext.	30-60	Yes.	No.	No.	Yes.	No.
2-Butoxyethanol	10-30	Yes.	No.	No.	Yes.	No.
Amides, coco, N,N-	5-10	No.	No.	No.	Yes.	Yes.
bis(hydroxyethyl) Nonylphenol,	1-5	No.	No.	No.	Yes.	No.
ethoxylated Diethanolamine	1-5	No.	No.	No.	Yes.	Yes.
Dodecyltrimethylamine oxide	0.1-1	No.	No.	No.	Yes.	No.

## Section 15. Regulatory information

### SARA 313

	Product name	CAS Number	%
Form R – Reporting Requirements	2-Butoxyethanol	111-76-2	10-30
	Diethanolamine	111-42-2	1-5
Supplier notification	2-Butoxyethanol	111-76-2	10-30
	Diethanolamine	111-42-2	1-5

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

### State regulations

**Massachusetts** : The following components are listed: 2-Butoxyethanol; Diethanolamine

**New York** : The following components are listed: Diethanolamine

**New Jersey** : The following components are listed: 2-Butoxyethanol; Diethanolamine

**Pennsylvania** : The following components are listed: 2-Butoxyethanol; Diethanolamine

## Section 15. Regulatory information

### California Prop. 65

**WARNING:** This product contains a chemical known to the State of California to cause cancer.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Amides, coco, N,N-bis(hydroxyethyl)	Yes.	No.	No.	No.
Diethanolamine	Yes.	No.	No.	No.

## Section 16. Other information

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

**Health :** 2    **Flammability :** 2    **Physical hazards :** 0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J.J. Keller.

The customer is responsible for determining the PPE code for this material.

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

**Health :** 2    **Flammability :** 2    **Instability:** 0

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in

NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

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**Schedule B Code** : 3402.90.5030

**History**

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**Version** : 1  
**Revised Section(s)** : Not applicable.  
**Prepared by** : Schaeffer Manufacturing Company

**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.