

# SAFETY DATA SHEET

## 1. Identification

**Product identifier:** FOAMING ENGINE DEGREASER

**Other means of identification**

**SDS number:** RE1000040577

**Recommended restrictions**

**Product use:** Cleaner

**Restrictions on use:** Not known.

**Manufacturer/Importer/Distributor Information**

**Manufacturer**

Company Name: The Penray Companies, Inc.  
Address: 440 Denniston Ct.  
Wheeling, IL 60090  
Telephone: (800) 373-6729  
Fax:

**Emergency telephone number:** 1-800-424-9300

## 2. Hazard(s) identification

**Hazard Classification**

**Physical Hazards**

Flammable aerosol Category 1

**Health Hazards**

Serious Eye Damage/Eye Irritation Category 2A

Skin sensitizer Category 1

**Environmental Hazards**

Acute hazards to the aquatic environment Category 2

Chronic hazards to the aquatic environment Category 2

**Label Elements**

**Hazard Symbol:**



**Signal Word:** Danger

**Hazard Statement:** Extremely flammable aerosol.  
Causes serious eye irritation.  
May cause an allergic skin reaction.  
Toxic to aquatic life with long lasting effects.

**Precautionary Statements**

<b>Prevention:</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment.
<b>Response:</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see on this label). Wash contaminated clothing before reuse. Collect spillage.
<b>Storage:</b>	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
<b>Disposal:</b>	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
<b>Hazard(s) not otherwise classified (HNOC):</b>	None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Butane	106-97-8	1 - <5%
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)-	5989-27-5	1 - <5%
Ethanol, 2-butoxy-	111-76-2	1 - <5%
Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4)	64-02-8	1 - <3%
Propane	74-98-6	1 - <5%
Glycine, N-methyl-N-(1-oxododecyl)-, sodium salt (1:1)	137-16-6	0.1 - <1%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

<b>Ingestion:</b>	Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
<b>Inhalation:</b>	Move to fresh air.
<b>Skin Contact:</b>	If skin irritation occurs: Get medical advice/attention. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.
<b>Eye contact:</b>	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

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

**Symptoms:** No data available.

**Hazards:** No data available.

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

**Treatment:** No data available.

## 5. Fire-fighting measures

**General Fire Hazards:** Use water spray to keep fire-exposed containers cool. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

### Suitable (and unsuitable) extinguishing media

**Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.

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

**Specific hazards arising from the chemical:** Vapors may travel considerable distance to a source of ignition and flash back.

### Special protective equipment and precautions for firefighters

**Special fire fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind. See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

**Methods and material for containment and cleaning up:** Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.

**Notification Procedures:** Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk.

**Environmental Precautions:** Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer.

## 7. Handling and storage

**Precautions for safe handling:** Avoid contact with eyes. Wash hands thoroughly after handling. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Avoid contact with eyes, skin, and clothing.

**Conditions for safe storage, including any incompatibilities:** Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Aerosol Level 1

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Butane	REL	800 ppm 1,900 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	STEL	1,000 ppm	US. ACGIH Threshold Limit Values (03 2018)
	TWA	800 ppm 1,900 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Ethanol, 2-butoxy-	TWA	20 ppm	US. ACGIH Threshold Limit Values (2008)
	TWA	25 ppm 120 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	REL	5 ppm 24 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	50 ppm 240 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Propane	REL	1,000 ppm 1,800 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	1,000 ppm 1,800 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	1,000 ppm 1,800 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Sodium hydroxide (Na(OH))	Ceiling	2 mg/m3	US. ACGIH Threshold Limit Values (2008)
	Ceiling	2 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	Ceil_Time	2 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	2 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Ammonium hydroxide ((NH4)(OH))	STEL	35 ppm	US. ACGIH Threshold Limit Values (2008)
	TWA	25 ppm	US. ACGIH Threshold Limit Values (2008)
	STEL	35 ppm 27 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	35 ppm 27 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	REL	25 ppm 18 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	50 ppm 35 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

#### Biological Limit Values

Chemical Identity	Exposure Limit Values	Source
Ethanol, 2-butoxy- (Butoxyacetic acid (BAA), with hydrolysis: Sampling time: End of shift.)	200 mg/g (Creatinine in urine)	ACGIH BEL (03 2013)

#### Appropriate Engineering Controls

No data available.

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

##### General information:

Provide easy access to water supply and eye wash facilities. 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. If exposure limits have not been established, maintain airborne levels to an acceptable level.

##### Eye/face protection:

Wear safety glasses with side shields (or goggles).

##### Skin Protection

##### Hand Protection:

No data available.

<b>Other:</b>	Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.
<b>Respiratory Protection:</b>	In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.
<b>Hygiene measures:</b>	Avoid contact with eyes. Observe good industrial hygiene practices. When using do not smoke. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin.

## 9. Physical and chemical properties

### Appearance

<b>Physical state:</b>	liquid
<b>Form:</b>	Spray Aerosol
<b>Color:</b>	No data available.
<b>Odor:</b>	No data available.
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	No data available.
<b>Melting point/freezing point:</b>	No data available.
<b>Initial boiling point and boiling range:</b>	No data available.
<b>Flash Point:</b>	-104.44 °C
<b>Evaporation rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.
<b>Upper/lower limit on flammability or explosive limits</b>	
<b>Flammability limit - upper (%):</b>	No data available.
<b>Flammability limit - lower (%):</b>	No data available.
<b>Explosive limit - upper (%):</b>	No data available.
<b>Explosive limit - lower (%):</b>	No data available.
<b>Vapor pressure:</b>	2,757.9029 - 4,136.8543 hPa (20 °C)
<b>Vapor density:</b>	No data available.
<b>Density:</b>	No data available.
<b>Relative density:</b>	No data available.
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	No data available.
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.

## 10. Stability and reactivity

<b>Reactivity:</b>	No data available.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	No data available.
<b>Conditions to avoid:</b>	Avoid heat or contamination.

**Incompatible Materials:** No data available.  
**Hazardous Decomposition Products:** No data available.

## 11. Toxicological information

### Information on likely routes of exposure

**Inhalation:** No data available.  
**Skin Contact:** No data available.  
**Eye contact:** No data available.  
**Ingestion:** No data available.

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

**Inhalation:** No data available.  
**Skin Contact:** No data available.  
**Eye contact:** No data available.  
**Ingestion:** No data available.

### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

**Oral**  
**Product:** ATEmix: 51,845.18 mg/kg

**Dermal**  
**Product:** ATEmix: 35,105.26 mg/kg

**Inhalation**  
**Product:** ATEmix: 203.74 mg/l  
ATEmix : 19.49 mg/l

#### Repeated dose toxicity

**Product:** No data available.

**Specified substance(s):**

Butane  
LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study  
NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study

Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)-  
Ethanol, 2-butoxy-  
NOAEL (Rat(Male), Oral, 13 Weeks): 600 mg/kg Oral Experimental result, Key study  
NOAEL (Rabbit(Female, Male), Dermal, 90 d): > 150 mg/kg Dermal Experimental result, Key study  
NOAEL (Rat(Female), Oral, 90 d): < 82 mg/kg Oral Experimental result, Key study  
NOAEL (Rat(Female), Inhalation, 2 yr): < 31 ppm(m) Inhalation Experimental result, Key study

Glycine, N,N'-1,2-ethanediyibis[N-(carboxymethyl)-, sodium salt (1:4)  
NOAEL (Rat(Female, Male), Oral, 103 Weeks): >= 500 mg/kg Oral Read-across from supporting substance (structural analogue or surrogate), Key study  
LOAEL (Rat(Male), Inhalation, 1 - 5 d): 30 mg/m3 Inhalation Read-across from supporting substance (structural analogue or surrogate), Key study

Propane  
NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study  
LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study

Glycine, N-methyl-N-(1-oxododecyl)-, sodium salt (1:1) NOAEL (Rat(Female, Male), Oral, >= 91 d): 30 mg/kg Oral Experimental result, Key study

#### Skin Corrosion/Irritation

**Product:** No data available.

**Specified substance(s):**

Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)- in vivo (Rabbit): Not irritant Experimental result, Key study

Ethanol, 2-butoxy- in vivo (Rabbit): Irritating Experimental result, Key study

Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4) in vivo (Rabbit): Not irritant Experimental result, Key study

Glycine, N-methyl-N-(1-oxododecyl)-, sodium salt (1:1) Assessment Irritating in vivo (Rabbit): Not irritant Experimental result, Key study

#### Serious Eye Damage/Eye Irritation

**Product:** No data available.

**Specified substance(s):**

Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)- Rabbit, 24 - 72 hrs: Not irritating

Ethanol, 2-butoxy- Rabbit, 24 - 72 hrs: Irritating

Glycine, N-methyl-N-(1-oxododecyl)-, sodium salt (1:1) Rabbit, 24 - 72 hrs: Irritating

#### Respiratory or Skin Sensitization

**Product:** No data available.

**Specified substance(s):**

Ethanol, 2-butoxy- Skin sensitization:, in vivo (Guinea pig): Non sensitising  
Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4) Skin sensitization:, in vivo (Guinea pig): Non sensitising

Glycine, N-methyl-N-(1-oxododecyl)-, sodium salt (1:1) Skin sensitization:, in vivo (Guinea pig): Non sensitising

#### Carcinogenicity

**Product:** No data available.

#### IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

#### US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

## Germ Cell Mutagenicity

**In vitro**  
**Product:** No data available.

**In vivo**  
**Product:** No data available.

**Reproductive toxicity**  
**Product:** No data available.

**Specific Target Organ Toxicity - Single Exposure**  
**Product:** No data available.

**Specific Target Organ Toxicity - Repeated Exposure**  
**Product:** No data available.

**Aspiration Hazard**  
**Product:** No data available.

**Other effects:** No data available.

## 12. Ecological information

### Ecotoxicity:

#### Acute hazards to the aquatic environment:

##### Fish

**Product:** No data available.

##### Specified substance(s):

Butane	LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)-	EC 50 (Pimephales promelas, 96 h): 688 µg/l Experimental result, Key study
Ethanol, 2-butoxy-	LC 50 (Oncorhynchus mykiss, 96 h): 1,474 mg/l Experimental result, Key study
Glycine, N,N'-1,2-ethanediybis[N-(carboxymethyl)-, sodium salt (1:4)	LC 50 (Lepomis macrochirus, 96 h): 121 mg/l Experimental result, Key study NOAEL (Lepomis macrochirus, 96 h): 88 mg/l Experimental result, Key study
Propane	LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study

##### Aquatic Invertebrates

**Product:** No data available.

##### Specified substance(s):

Butane	LC 50 (Daphnia sp., 48 h): 69.43 mg/l QSAR QSAR, Key study
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)-	EC 50 (Daphnia magna, 48 h): 0.36 mg/l Experimental result, Key study NOAEL (Daphnia magna, 48 h): 0.074 mg/l Experimental result, Key study
Ethanol, 2-butoxy-	EC 50 (Daphnia magna, 48 h): 1,550 mg/l Experimental result, Key study
Glycine, N,N'-1,2-ethanediybis[N-(carboxymethyl)-, sodium salt (1:4)	EC 50 (Daphnia magna, 24 h): 610 mg/l Experimental result, Key study



Glycine, N-methyl-N-(1-oxododecyl)-, sodium salt (1:1) NOAEL (Daphnia magna, 48 h): 5 mg/l Experimental result, Key study  
LC 50 (Daphnia magna, 48 h): 29.7 mg/l Experimental result, Key study

#### Chronic hazards to the aquatic environment:

##### Fish

**Product:** NOEC : Estimated < 1 mg/l

##### Aquatic Invertebrates

**Product:** No data available.

##### Specified substance(s):

Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)- NOAEL (Freshwater invertebrates, species frequently include Daphnia magna or Daphnia pulex): 0.115 mg/l QSAR QSAR, Weight of Evidence study

Ethanol, 2-butoxy- EC 50 (Daphnia magna): 297 mg/l Experimental result, Key study  
EC 10 (Daphnia magna): 134 mg/l Experimental result, Key study

Glycine, N,N'-1,2-ethanediybis[N-(carboxymethyl)-, sodium salt (1:4) NOAEL (Daphnia magna): 25 mg/l Read-across from supporting substance (structural analogue or surrogate), Key study

##### Toxicity to Aquatic Plants

**Product:** No data available.

#### Persistence and Degradability

##### Biodegradation

**Product:** No data available.

##### Specified substance(s):

Butane 100 % (385.5 h) Detected in water. Experimental result, Key study

Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)- 80 % (28 d) Detected in water. Read-across from supporting substance (structural analogue or surrogate), Key study

Ethanol, 2-butoxy- 90.4 % Detected in water. Experimental result, Key study

Glycine, N,N'-1,2-ethanediybis[N-(carboxymethyl)-, sodium salt (1:4) 90 - 100 % (28 d) Detected in water. Read-across from supporting substance (structural analogue or surrogate), Weight of Evidence study

Propane 100 % (385.5 h) Detected in water. Experimental result, Key study  
50 % (3.19 d) Detected in water. QSAR, Weight of Evidence study

Glycine, N-methyl-N-(1-oxododecyl)-, sodium salt (1:1) 82 % (28 d) Detected in water. Experimental result, Key study

##### BOD/COD Ratio

**Product:** No data available.

#### Bioaccumulative potential

##### Bioconcentration Factor (BCF)

**Product:** No data available.

##### Specified substance(s):

Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)- Bioconcentration Factor (BCF): 864.8 Aquatic sediment QSAR, Key study

Glycine, N,N'-1,2-ethanediybis[N-(carboxymethyl)-, sodium salt (1:4)

Lepomis macrochirus, Bioconcentration Factor (BCF): 1.8 Aquatic sediment  
Experimental result, Key study

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

**Product:** No data available.

**Specified substance(s):**

Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)- Log Kow: 4.34 - 4.46 25 °C No Experimental result, Supporting study

Glycine, N-methyl-N-(1-oxododecyl)-, sodium salt (1:1) Log Kow: 0.37

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

**Known or predicted distribution to environmental compartments**

Butane No data available.

Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)- No data available.

Ethanol, 2-butoxy- No data available.

Glycine, N,N'-1,2-

ethanediybis[N-(carboxymethyl)-, sodium salt (1:4)

Propane No data available.

Glycine, N-methyl-N-(1-oxododecyl)-, sodium salt (1:1) No data available.

**Other adverse effects:** Toxic to aquatic life with long lasting effects.

**13. Disposal considerations**

**Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local laws.

**Contaminated Packaging:** No data available.

**14. Transport information**

**DOT**

UN Number: UN 1950  
UN Proper Shipping Name: Aerosols, flammable  
Transport Hazard Class(es)  
Class: 2.1  
Label(s): -  
Packing Group: II  
Marine Pollutant: No

Environmental Hazards: No  
Marine Pollutant: No

Special precautions for user: Not regulated.

**IMDG**

UN Number: UN 1950  
UN Proper Shipping Name: Aerosols, flammable  
Transport Hazard Class(es)  
Class: 2  
Label(s): -

EmS No.: F-D, S-U  
Packing Group: -  
Environmental Hazards: Yes  
Marine Pollutant: No  
Special precautions for user: Not regulated.

**IATA**

UN Number: UN 1950  
Proper Shipping Name: Aerosols, flammable  
Transport Hazard Class(es):  
Class: 2.1  
Label(s): -  
Packing Group: -  
Environmental Hazards: Yes  
Marine Pollutant: No  
Special precautions for user: Not regulated.  
Cargo aircraft only: Allowed.

**15. Regulatory information**

**US Federal Regulations**

Restrictions on use: Not known.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Butane	lbs. 100
Propane	lbs. 100
Sodium hydroxide (Na(OH))	lbs. 1000
Ammonium hydroxide ((NH4)(OH))	lbs. 1000

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

Fire Hazard  
Immediate (Acute) Health Hazards  
Flammable aerosol  
Serious Eye Damage/Eye Irritation  
Skin sensitizer

**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

**SARA 304 Emergency Release Notification**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Butane	lbs. 100
Ethanol, 2-butoxy-	
Propane	lbs. 100
Sodium hydroxide (Na(OH))	lbs. 1000
Ammonium hydroxide ((NH4)(OH))	lbs. 1000

**SARA 311/312 Hazardous Chemical**

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
Butane	10000 lbs
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)-	10000 lbs
Ethanol, 2-butoxy-	10000 lbs
Glycine, N,N'-1,2-ethanediybis[N-(carboxymethyl)-, sodium salt (1:4)	10000 lbs
Propane	10000 lbs
Glycine, N-methyl-N-(1-oxododecyl)-, sodium salt (1:1)	10000 lbs
Sodium hydroxide (Na(OH))	10000 lbs
Ammonium hydroxide ((NH4)(OH))	10000 lbs

**SARA 313 (TRI Reporting)**

<u>Chemical Identity</u>	<u>Reporting threshold for other users</u>	<u>Reporting threshold for manufacturing and processing</u>
Ethanol, 2-butoxy-	N230 lbs	N230 lbs.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):  
Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)  
US State Regulations**

**US. California Proposition 65**

No ingredient requiring a warning under CA Prop 65.

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

Chemical Identity

Butane  
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)-  
Ethanol, 2-butoxy-  
Propane

**US. Massachusetts RTK - Substance List**

Chemical Identity

Glycine, N,N-bis(carboxymethyl)-, sodium salt (1:3)

**US. Pennsylvania RTK - Hazardous Substances**

Chemical Identity

Butane  
Ethanol, 2-butoxy-  
Propane

**US. Rhode Island RTK**

No ingredient regulated by RI Right-to-Know Law present.

**International regulations**

**Montreal protocol**

Not applicable

**Stockholm convention**

Not applicable

**Rotterdam convention**

Not applicable

**Kyoto protocol**

Not applicable

**Inventory Status:**

Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
EINECS, ELINCS or NLP:	Not in compliance with the inventory.
Japan (ENCS) List:	On or in compliance with the inventory
China Inv. Existing Chemical Substances:	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI):	Not in compliance with the inventory.
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	Not in compliance with the inventory.
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Japan ISHL Listing:	Not in compliance with the inventory.
Japan Pharmacopoeia Listing:	Not in compliance with the inventory.
Mexico INSQ:	Not in compliance with the inventory.
Ontario Inventory:	On or in compliance with the inventory
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory

**16. Other information, including date of preparation or last revision**

<b>Issue Date:</b>	10/22/2019
<b>Revision Information:</b>	No data available.
<b>Version #:</b>	1.0
<b>Further Information:</b>	No data available.
<b>Disclaimer:</b>	This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.