

Version: 1.0 Revision Date: 10/08/2019

Item 11

# SAFETY DATA SHEET

### 1. Identification

Product identifier: CITRA GLOSS ALL SURFACE DUSTER & POLISH

Other means of identification SDS number: RE1000010974

#### **Recommended restrictions**

Product use: Cleaner Restrictions on use: Not known.

#### Manufacturer/Importer/Distributor Information

#### Manufacturer

Company Name:	CLAIRE MANUFACTURING COMPANY
Address:	1000 Integram Dr
	Pacific, MO 63069
Telephone:	1-630-543-7600
Fax:	

Emergency telephone number: 1-866-836-8855

### 2. Hazard(s) identification

### **Hazard Classification**

Physical Hazards	
Flammable aerosol	Category 1
Health Hazards	
Skin sensitizer	Category 1
Aspiration Hazard	Category 1

#### **Environmental Hazards**

Acute hazards to the aquatic	Category 3
environment	

#### **Label Elements**

### Hazard Symbol:



Signal Word:

Danger

Hazard Statement:

Extremely flammable aerosol. May cause an allergic skin reaction. May be fatal if swallowed and enters airways. Harmful to aquatic life.

#### Precautionary Statements



Prevention:	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 breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.
Response:	IF ON SKIN: Wash with plenty of water If skin irritation or rash occurs: Get medical advice/attention. IF SWALLOWED: Immediately call a POISON CENTER/doctor Do NOT induce vomiting. Specific treatment (see on this label). Wash contaminated clothing before reuse.
Storage:	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store locked up.
Disposal:	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.
Hazard(s) not otherwise classified (HNOC):	None.

### 3. Composition/information on ingredients

#### **Mixtures**

Chemical Identity	CAS number	Content in percent (%)*
White mineral oil (petroleum)	8042-47-5	20 - <50%
Butane	106-97-8	5 - <10%
Propane	74-98-6	1 - <5%
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)-	5989-27-5	1 - <5%

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

### 4. First-aid measures

Ingestion:	Rinse mouth thoroughly.	
Inhalation:	Move to fresh air.	
Skin Contact:	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.	
Eye contact:	Rinse immediately with plenty of water.	
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) extingu	lishing 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 an	d 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 measure	S
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:	Stop the flow of material, if this is without risk. Absorb with sand or other inert absorbent.
Notification Procedures:	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.
7. Handling and storage	
Precautions for safe 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. Wash hands thoroughly after handling.
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**

Mist.   PEL   5 mg/m3   US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)     TWA   5 mg/m3   US. NCSH: Pocket Guide to Chemical Hazards (2005)     TWA   5 mg/m3   US. ACGIH Threshold Limit Values (01 2010)     Imhabele fraction.   8EL   800 ppm   1.900 mg/m3   US. ACGIH Threshold Limit Values (03 2018)     Finalable fraction.   8EL   1.000 ppm   1.900 mg/m3   US. ACGIH Threshold Limit Values (03 2018)     TWA   800 ppm   1.900 mg/m3   US. ACGIH Threshold Limit Values (03 2018)     Propane   REL   1.000 ppm   1.900 mg/m3   US. ACGIH Threshold Limit Values (03 2018)     Propane   REL   1.000 ppm   1.800 mg/m3   US. OSHA Table Z-1 Limits for Air Contaminants (2005)     Silica   REL   1.000 ppm   1.800 mg/m3   US. OSHA Table Z-1 (29 CFR 1910.1000) (1986)     Silica   REL   6 mg/m3   US. OSHA Table Z-1 (29 CFR 1910.1000) (1986)     Silica   REL   35 ppm   US. OSHA Table Z-1 (29 CFR 1910.1000) (2000)     TWA   2 mg/m3   US. OSHA Table Z-1 (29 CFR 1910.1000) (2000)     TWA   2 mg/m3   US. OSHA Table Z-1	Chemical Identity	Туре	Exposur	e Limit Values	Source
PEL   5 mg/m3   US: 05HA Table 2-1 Limits for Air Contaminants (20 CFR 1910.1000) (02 2006)     STEL   10 mg/m3   US: MIOSH: Pocket Guide to Chemical Hazards (2005)     White mineral oil (pertoleum)   TWA   5 mg/m3   US: OSHA Table Z-1-A (29 CFR 1910.1000) (1985)     US: ACGIH Threshold Limit Values (01 2010)   Inhabale fraction.   REL   800 ppm   1,900 mg/m3   US: MIOSH: Pocket Guide to Chemical Hazards (2005)     Propane   REL   1,000 ppm   US: ACGIH Threshold Limit Values (03 2018)     Propane   REL   1,000 ppm   US: ACGIH Threshold Limit Values (03 2018)     Propane   REL   1,000 ppm   1,800 mg/m3   US: OSHA Table Z-1 A (29 CFR 1910.1000) (1985)     Stilca   REL   6 mg/m3   US: OSHA Table Z-1 Limits for Air Contaminants (2005)   US: OSHA Table Z-1 A (29 CFR 1910.1000) (1986)     Stilca   REL   6 mg/m3   US: OSHA Table Z-1 A (29 CFR 1910.1000) (1986)   US: OSHA Table Z-1 A (29 CFR 1910.1000) (2000)     TWA   0.00 ppm   1,800 mg/m3   US: OSHA Table Z-1 A (29 CFR 1910.1000) (2000)   US: OSHA Table Z-1 A (29 CFR 1910.1000) (2000)     TWA   0.0 mg/m3   US: OSHA Table Z-1 A (29 CFR 1910.1000) (1986)   US: OSHA Table Z-1 A (29 CFR 19	White mineral oil (petroleum) - Mist.	REL		5 mg/m3	
STEL   10 mg/m3   US. NIOSH: Pocket Guide to Chemical Hazards (2006)     White mineral oil (petroleum)   TWA   5 mg/m3   US. CSHA Table Z-1-A (29 CFR 1910.1000) (1980)     Inhalable fraction.   REL   800 ppm   1,900 mg/m3   US. NIOSH: Pocket Guide to Chemical Hazards (2006)     Strate   1,000 ppm   US. NIOSH: Pocket Guide to Chemical Hazards (2006)   Chemical Hazards (2006)     Propane   REL   1,000 ppm   US. NIOSH: Pocket Guide to Chemical Hazards (2006)     Propane   REL   1,000 ppm   US. NIOSH: Pocket Guide to Chemical Hazards (2006)     PEL   1,000 ppm   1,800 mg/m3   US. OSHA Table Z-1-A (29 CFR 1910.1000) (1980)     Strate   REL   6 mg/m3   US. NIOSH: Pocket Guide to Chemical Hazards (2006)     Strate   REL   6 mg/m3   US. OSHA Table Z-1-A (29 CFR 1910.1000) (1980)     Strate   8 mg/m3   US. OSHA Table Z-1-A (29 CFR 1910.1000) (2000)     TWA   20 millons of patricles per cubic fot of air   US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)     TWA   20 mg/m3   US. OSHA Table Z-4 (20 CFR 1910.1000) (2000)     Armonium hydroxide   STEL   35 ppm   US. ACGHI Threshold Limit Values (2008		PEL		5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants
TWA   5 mg/m3   US. OSHA Table 2-1-A (22 CFR 1910.1000) (1986)     Inhalable fraction.   REL   800 ppm   1,900 mg/m3   US. ACGIH Threshold Limit Values (01 2010)     Inhalable fraction.   REL   800 ppm   1,900 mg/m3   US. NIOSH: Pocket Guide to Chemical Hazards (2005)     TWA   800 ppm   1,900 mg/m3   US. SCHA Table 2-1-A (22 CFR 1910.1000) (1986)     Propane   REL   1,000 ppm   1,800 mg/m3   US. SCHA Table 2-1-A (22 CFR 1910.1000) (1986)     PEL   1,000 ppm   1,800 mg/m3   US. SCHA Table 2-1-A (22 CFR 1910.1000) (1986)     Silica   REL   6 mg/m3   US. SCHA Table 2-1-A (22 CFR 1910.1000) (1986)     Silica   REL   6 mg/m3   US. SCHA Table 2-1-A (22 CFR 1910.1000) (1986)     TWA   0.00 ppm   1,800 mg/m3   US. SCHA Table 2-1-A (22 CFR 1910.1000) (1986)     Silica   REL   35 ppm   US. SCHA Table 2-3 (29 CFR 1910.1000) (2020)     TWA   20 millions of particles per cubic locit of air   US. SCHA Table 2-3 (29 CFR 1910.1000) (2000)     TWA   25 ppm   US. SCHA Table 2-3 (29 CFR 1910.1000) (2000)     Mamonium hydroxide   STEL   35 ppm   US. SCHA Ta		STEL		10 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards
Inhalable fraction.   REL   800 ppm   1,900 mg/m3   US. NIOSH: Pockat Guide to Chemical Hazards (2006)     Butane   REL   800 ppm   1,900 mg/m3   US. NIOSH: Pockat Guide to Chemical Hazards (2006)     TWA   800 ppm   1,900 mg/m3   US. SIGHT Preshold Limit Values (03 2018)     Propane   REL   1,000 ppm   1,800 mg/m3   US. SIGHT Pockat Guide to Chemical Hazards (2006)     PEL   1,000 ppm   1,800 mg/m3   US. OSHA Table Z-1 A (29 CFR 1910.1000) (1986)     Silica   REL   6 mg/m3   US. SIAT Table Z-1 A (29 CFR 1910.1000) (1986)     Silica   REL   6 mg/m3   US. OSHA Table Z-1 A (29 CFR 1910.1000) (1986)     TWA   6 mg/m3   US. OSHA Table Z-1 A (29 CFR 1910.1000) (2000)     TWA   20 millions of piar   US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)     Ammonium hydroxide   STEL   35 ppm   US. ACGIH Threshold Limit Values (2008)     (MH4)(OH)   TWA   25 ppm   US. NIOSH: Pocket Guide to Chemical Hazards (2005)     (MH4)(OH)   TWA   25 ppm   US. OSHA Table Z-1 A (29 CFR 1910.1000) (02 2006)     REL   35 ppm   27 mg/m3   US. CGHA Table Z-		TWA		5 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Butane   REL   800 ppm   1,900 mg/m3   US. NIOSH: Pocket Guide to Chemical Hazards (2005)     STEL   1,000 ppm   US. AGCIH Threshold Limit Values (03 2018)     TWA   800 ppm   1,900 mg/m3   US. OSHA Table Z-1-Limits for Air Contaminants (20 CFR 1910.1000) (1986 (2005)     Propane   REL   1,000 ppm   1,800 mg/m3   US. OSHA Table Z-1 Limits for Air Contaminants (20 CFR 1910.1000) (20 2006)     TWA   1,000 ppm   1,800 mg/m3   US. OSHA Table Z-1 A (29 CFR 1910.1000) (1986 (2005)     Silica   REL   6 mg/m3   US. OSHA Table Z-1 A (29 CFR 1910.1000) (1986 (2005)     Silica   REL   6 mg/m3   US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)     TWA   0.8 mg/m3   US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)     Armonium hydroxide   STEL   35 ppm   US. ACGIH Threshold Limit Values (2008)     STEL   35 ppm   27 mg/m3   US. OSHA Table Z-3 (29 CFR 1910.1000) (1986 (2005)     STEL   35 ppm   US. ACGIH Threshold Limit Values (2008)   ((NH4)(OH))     TWA   25 ppm   US. ACGIH Threshold Limit Values (2008)   (US. NIOSH.Pocket Guide to Chemical Hazards (2005)     US. NIOSH.Pocket Guide to Chemical Hazards		TWA		5 mg/m3	US. ACGIH Threshold Limit Values (01 2010)
STEL   1,000 ppm   US. ACGIH Threshold Limit Values (03 2018)     Propane   REL   1,000 ppm   1,800 mg/m3   US. OSHA Table Z-1-A (29 CFR 1910.1000) (1986 (2005)     PEL   1,000 ppm   1,800 mg/m3   US. NICSH- Pocket Guide to Chemical Hazards (20 CFR 1910.1000) (20 206)     Silica   REL   6 mg/m3   US. OSHA Table Z-1-1 Limits for Air Contaminants (29 CFR 1910.1000) (20 206)     Silica   REL   6 mg/m3   US. OSHA Table Z-1-A (29 CFR 1910.1000) (1986 (2005)     Silica   REL   6 mg/m3   US. OSHA Table Z-1-A (29 CFR 1910.1000) (1986 (2005)     TWA   6 mg/m3   US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)     TWA   0.8 mg/m3   US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)     Ammonium hydroxide   STEL   35 ppm   US. ACGIH Threshold Limit Values (2008)     STEL   35 ppm   27 mg/m3   US. NOSH- Table Z-1-A (29 CFR 1910.1000) (1965     STEL   35 ppm   27 mg/m3   US. NIOSH: Pocket Guide to Chemical Hazards (2005)     REL   25 ppm   US. NIOSH: Pocket Guide to Chemical Hazards (2005)   US. NIOSH: Pocket Guide to Chemical Hazards (2005)     REL   5 ppm   27 mg/m3   US. NIOSH: Pocket Gu		REL	800 ppm	1,900 mg/m3	
Propane   REL   1.000 ppm   1,800 mg/m3   US. NIOSH: Pocket Guide to Chemical Hazards (2005)     VIA   1,000 ppm   1,800 mg/m3   US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)     Silica   REL   6 mg/m3   US. OSHA Table Z-1-A (29 CFR 1910.1000) (1985 (2005)     Silica   REL   6 mg/m3   US. OSHA Table Z-1-A (29 CFR 1910.1000) (1985 (2005)     TWA   6 mg/m3   US. OSHA Table Z-1-A (29 CFR 1910.1000) (1985 (2005)     TWA   0.8 mg/m3   US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)     Ammonium hydroxide   STEL   35 ppm   US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)     Ammonium hydroxide   STEL   35 ppm   US. NCH-Table Z-3 (29 CFR 1910.1000) (2000)     STEL   35 ppm   27 mg/m3   US. OSHA Table Z-1-A (29 CFR 1910.1000) (1985 (2005)     STEL   35 ppm   27 mg/m3   US. NIOSH: Pocket Guide to Chemical Hazards (2005)     VIA   25 ppm   18 mg/m3   US. NIOSH: Pocket Guide to Chemical Hazards (2005)     VIA   1 ppm   25 ppm   18 mg/m3   US. NIOSH: Pocket Guide to Chemical Hazards (2005)     VIA   1 ppm   35 mg/m3   US. NIOSH		STEL	1,000 ppm		
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-1.4 (29 CFR 1910.1000) (1986)     Silica   REL   6 mg/m3   US   OSHA Table Z-1.4 (29 CFR 1910.1000) (1986)     TWA   6 mg/m3   US   OSHA Table Z-1.4 (29 CFR 1910.1000) (2000)     TWA   6 mg/m3   US   OSHA Table Z-3 (29 CFR 1910.1000) (2000)     TWA   20 millions of particles per ucubic foot of air   US   OSHA Table Z-3 (29 CFR 1910.1000) (2000)     Ammonium hydroxide   STEL   35 ppm   US   NCAGIH Threshold Limit Values (2008)     STEL   35 ppm   27 mg/m3   US   NOSHA Table Z-1.4 (29 CFR 1910.1000) (1986)     STEL   35 ppm   27 mg/m3   US   NOSHA Table Z-1.4 (29 CFR 1910.1000) (1986)     STEL   35 ppm   27 mg/m3   US   NOSHA Table Z-1.4 (29 CFR 1910.1000) (1986)     (NH4)(OH))   TWA   25 ppm   18 mg/m3   US   NIOSH: Pocket Guide to Chemical Hazards (2005)     (2015)   STEL   35 ppm   27 mg/m3   US		TWA	800 ppm	1,900 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
TWA   1,000 ppm   1,800 mg/m3   US. CSHA Table Z-1-A (29 CFR 1910.1000) (1985     Silica   REL   6 mg/m3   US. NIOSH: Pocket Guide to Chemical Hazards (2005)     TWA   6 mg/m3   US. OSHA Table Z-1-A (29 CFR 1910.1000) (1985     TWA   6 mg/m3   US. OSHA Table Z-1-A (29 CFR 1910.1000) (2000)     TWA   20 millions of particles per cubic toot of all   US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)     Ammonium hydroxide   STEL   35 ppm   US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)     Ammonium hydroxide   STEL   35 ppm   US. ACGIH Threshold Limit Values (2008)     (NH4)(OH))   TWA   25 ppm   US. OSHA Table Z-1-A (29 CFR 1910.1000) (1965     STEL   35 ppm   27 mg/m3   US. NOSH: Pocket Guide to Chemical Hazards (2005)     REL   25 ppm   18 mg/m3   US. NOSH: Pocket Guide to Chemical Hazards (2005)     Cell_Time   5 ppm   9 mg/m3   US. NOSH: Pocket Guide to Chemical Hazards (2005)     Cell_Time   5 ppm   9 mg/m3   US. NOSH: Pocket Guide to Chemical Hazards (2005)     Cell_Time   5 ppm   9 mg/m3   US. NOSH: Pocket Guide to Chemical Hazards (2005)     Cell_Time<	Propane	REL	1,000 ppm	-	(2005)
Silica   REL   6 mg/m3 (2005)   US. NIOSH: Pocket Guide to Chemical Hazards (2005)     TWA   6 mg/m3 (2005)   US. OSHA Table Z-1-A (29 CFR 1910.1000) (1986)     TWA   20 millions of particles per cubic foot of air   US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)     Ammonium hydroxide   STEL   35 ppm   US. ACGIH Threshold Limit Values (2008)     STEL   35 ppm   US. ACGIH Threshold Limit Values (2008)   US. ACGIH Threshold Limit Values (2008)     STEL   35 ppm   27 mg/m3   US. NIOSH: Pocket Guide to Chemical Hazards (2005)     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)     Ethylene Oxide   Ceil_Time   5 ppm   9 mg/m3   US. OSHA Table Z-1 Limits for Air Contaminants (2005)     STEL   50 ppm   35 mg/m3   US. OSHA Specifically Regulated Substances (29 CFR 1910.1000) (02 2006)     TWA   1 ppm   US. OSHA Specifically Regulated Substances (29 CFR 1910.1000) (1062 006)     STEL   5 ppm   US. OSHA Table Z-1-A (29 CFR 1910.1000) (1986)     1,4-Dioxane   TWA   1 ppm   US. OSHA Tabl				1,800 mg/m3	(29 CFR 1910.1000) (02 2006)
TWA   6 mg/m3   US OSHA Table Z-1-A (29 CFR 1910.1000) (1986     TWA   20 millions   US. OSHA Table Z-1-A (29 CFR 1910.1000) (2000)     particles per cubic foot of air   US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)     Ammonium hydroxide   STEL   35 ppm     TWA   0.8 mg/m3   US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)     Ammonium hydroxide   STEL   35 ppm     STEL   35 ppm   US. ACGIH Threshold Limit Values (2008)     STEL   35 ppm   27 mg/m3   US. OSHA Table Z-1-A (29 CFR 1910.1000) (1986     STEL   35 ppm   27 mg/m3   US. NIOSH: Pocket Guide to Chemical Hazards (2005)     US. NIOSH: Pocket Guide to Chemical Hazards   (2005)   US. NIOSH: Pocket Guide to Chemical Hazards (2005)     Ethylene Oxide   Ceil_Time   5 ppm   9 mg/m3   US. NIOSH: Pocket Guide to Chemical Hazards (2005)     TWA   1 ppm   US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (02 2006)   2006)     STEL   5 ppm   US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (02 2006)   2006)     TWA   1 ppm   US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (02 2006)   20		TWA	1,000 ppm	1,800 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
TWA   20 millions of particles per cubic foot of air   US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)     Ammonium hydroxide   TWA   0.8 mg/m3   US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)     Ammonium hydroxide   STEL   35 ppm   US. ACGIH Threshold Limit Values (2008)     STEL   35 ppm   US. ACGIH Threshold Limit Values (2008)   US. ACGIH Threshold Limit Values (2008)     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. NIOSH: Pocket Guide to Chemical Hazards (2005)     Ethylene Oxide   Ceil_Time   5 ppm   9 mg/m3   US. NIOSH: Pocket Guide to Chemical Hazards (2005)     Ethylene Oxide   Ceil_Time   5 ppm   9 mg/m3   US. OSHA Specifically Regulated Substances (29 CFR 1910.1003) (02 2006)     TWA   1 ppm   US. OSHA Specifically Regulated Substances (29 CFR 1910.1003) (02 2006)   US. OSHA Specifically Regulated Substances (29 CFR 1910.1001.1053) (02 2006)     TWA   1 ppm   US. OSHA Table Z-1-A (29 CFR 1910.1000) (1986   (2005)     TWA   1 ppm   US. OSHA Table Z-1-A (29 CFR 19	Silica			-	(2005)
particles per cubic foot of air     TWA   0.8 mg/m3   US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)     Ammonium hydroxide (NH4)(OH))   STEL   35 ppm   US. ACGIH Threshold Limit Values (2008)     STEL   35 ppm   27 mg/m3   US. OSHA Table Z-1-A (29 CFR 1910.1000) (1985)     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)     Ethylene Oxide   Ceil_Time   5 ppm   9 mg/m3   US. NIOSH: Pocket Guide to Chemical Hazards (2005)     Ethylene Oxide   Ceil_Time   5 ppm   9 mg/m3   US. NIOSH: Pocket Guide to Chemical Hazards (2005)     Ethylene Oxide   Ceil_Time   5 ppm   9 mg/m3   US. NIOSH: Pocket Guide to Chemical Hazards (2005)     TWA   1 ppm   US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (02 2006)   2006)     TWA   1 ppm   US. NIOSH: Pocket Guide to Chemical Hazards (2005)   2006)     TWA   1 ppm   US. NIOSH: Pocket Guide to Chemical Hazard				6 mg/m3	. , , , , , , , , , , , , , , , , , , ,
TWA   0.8 mg/m3   US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)     Ammonium hydroxide (NH4)(OH))   STEL   35 ppm   US. ACGIH Threshold Limit Values (2008)     STEL   35 ppm   27 mg/m3   US. OSHA Table Z-1-A (29 CFR 1910.1000) (1985)     STEL   35 ppm   27 mg/m3   US. OSHA Table Z-1-A (29 CFR 1910.1000) (1985)     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. NIOSH: Pocket Guide to Chemical Hazards (2005)     Ethylene Oxide   Ceil_Time   5 ppm   9 mg/m3   US. NIOSH: Pocket Guide to Chemical Hazards (2005)     TWA   1 ppm   US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (02 2006)   02 CFR 1910.1000) (1026)     STEL   5 ppm   US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (02 2006)   0SHA_AC     0.5 ppm   US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (02 2006)   0SHA     TWA   1 ppm   US. NIOSH: Pocket Guide to Chemical Hazards (2005)   US. NIOSH: Pocket Guide to Chemical Hazards (2005)     TWA </td <td></td> <td>TWA</td> <td></td> <td>particles per</td> <td>US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)</td>		TWA		particles per	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
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		REL	10 ppm	25 mg/m3	



TWA	10 ppm	US. ACGIH Threshold Limit Values (2008)
STEL	15 ppm	US. ACGIH Threshold Limit Values (2008)

### **Biological Limit Values**

Chemical Identity	Exposure Limit Values	Source
Ethylene Oxide (S-(2-hydroxyethyl) mercapturic acid (HEMA): Sampling time: End of shift.)	5 μg/g (Creatinine in urine)	ACGIH BEL (03 2018)
Ethylene Oxide (N-(2-hydroxyethyl)-valine (HEV) hemoglobin adducts: Sampling time: Not critical.)	5000 pmol/g (Hemoglobin adducts)	ACGIH BEL (03 2018)

# Appropriate Engineering

No data available.

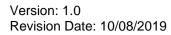
Controls

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

General information:	Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
Eye/face protection:	Wear goggles/face shield.
Skin Protection Hand Protection:	No data available.
Other:	Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.
Respiratory Protection:	In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.
Hygiene measures:	When using do not smoke. Observe good industrial hygiene practices. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin.

### 9. Physical and chemical properties

Appearance	
Physical state:	liquid
Form:	Spray Aerosol
Color:	No data available.
Odor:	No data available.
Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	No data available.
Flash Point:	-104.44 °C
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive	e limits
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.





Vapor pressure:	No data available.
Vapor density:	No data available.
Density:	No data available.
Relative density:	No data available.
Solubility(ies)	
Solubility in water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.

### 10. Stability and reactivity

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Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Avoid heat or contamination.
Incompatible Materials:	No data available.
Hazardous Decomposition Products:	No data available.

### 11. Toxicological information

Information on likely route Inhalation:	<b>s of exposure</b> No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.
Symptoms related to the p	hysical, chemical and toxico
Inhalation:	No data available

# ological characteristics

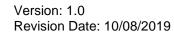
- Inhalation: No data available.
- **Skin Contact:** No data available.
- Eye contact: No data available.
- Ingestion: No data available.

### Information on toxicological effects

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



Oral Product:	Not classified for acute toxicity based on available data.
<b>Specified substance(s):</b> White mineral oil (petroleum)	LD 50 (Rat): > 5,000 mg/kg
Cyclohexene, 1-methyl-4- (1-methylethenyl)-, (4R)-	LD 50 (Rat): > 2,000 mg/kg
Dermal Product:	Not classified for acute toxicity based on available data.
<b>Specified substance(s):</b> White mineral oil (petroleum)	LD 50 (Rabbit): > 2,000 mg/kg
Cyclohexene, 1-methyl-4- (1-methylethenyl)-, (4R)-	LD 50 (Rabbit): > 5,000 mg/kg
Inhalation Product:	Not classified for acute toxicity based on available data.
Specified substance(s): White mineral oil (petroleum)	LC 50 (Rat): > 5 mg/l LC 50: > 20 mg/l
Butane	LC 50: > 100 mg/l LC 50: > 100 mg/l
Propane	LC 50: > 100 mg/l LC 50: > 100 mg/l
Cyclohexene, 1-methyl-4- (1-methylethenyl)-, (4R)-	LC 50: > 20 mg/l LC 50: > 5 mg/l
Repeated dose toxicity Product:	No data available.
<b>Specified substance(s):</b> White mineral oil (petroleum)	NOAEL (Rat(Female, Male), Oral, 90 d): >= 20,000 ppm(m) Oral Experimental result, Key study NOAEL (Rabbit(Female, Male), Dermal): 1,000 mg/kg Dermal Read-across from supporting substance (structural analogue or surrogate), Key study LOAEL (Rat(Female, Male), Inhalation): 210 mg/m3 Inhalation Experimental
Butane	result, Key study 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
Propane	Experimental result, Key study 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
Cyclohexene, 1-methyl-4- (1-methylethenyl)-, (4R)-	Experimental result, Key study NOAEL (Rat(Male), Oral, 13 Weeks): 600 mg/kg Oral Experimental result, Key study
Skin Corrosion/Irritation Product:	No data available.
Specified substance(s): White mineral oil (petroleum)	in vivo (Rabbit): Not irritant Experimental result, Key study





Cyclohexene, 1-methyl- 4-(1-methylethenyl)-, (4R)-	in vivo (Rabbit): Not irritant Experimental result, Key study	
Serious Eye Damage/Eye Irritation	on	
Product:	No data available.	
Specified substance(s):	Debbit 04 70 bres Net irritating	
White mineral oil (petroleum)	Rabbit, 24 - 72 hrs: Not irritating	
Cyclohexene, 1-methyl- 4-(1-methylethenyl)-, (4R)-	Rabbit, 24 - 72 hrs: Not irritating	
(41)-		
Respiratory or Skin Sensitization Product:	n No data available.	
<b>Specified substance(s):</b> White mineral oil (petroleum)	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	m (NTP) Report on Carcinogens: s 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 ExposureProduct:No data available.		
Specific Target Organ Toxicity - Product:	Repeated Exposure No data available.	
Aspiration Hazard Product:	No data available.	
Specified substance(s): White mineral oil (petroleum)	May be fatal if swallowed and enters airways.	

No data available.

Other effects:

(petroleum)



### 12. Ecological information

### Ecotoxicity:

### Acute hazards to the aquatic environment:

Fish Product: Specified substance(s): White mineral oil (petroleum)	No data available. NOAEL (Oncorhynchus mykiss, 96 h): >= 100 mg/l Experimental result, Key study LL 50 (Oncorhynchus mykiss, 96 h): > 100 mg/l Experimental result, Key study
Butane	LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study
Propane	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 $\mu$ g/l Experimental result, Key study
Aquatic Invertebrates Product:	No data available.
Specified substance(s): White mineral oil (petroleum)	NOAEL (Daphnia magna, 48 h): >= 100 mg/l Experimental result, Key study
Butane	LC 50 (Daphnia sp., 48 h): 69.43 mg/l QSAR QSAR, Key study
Cyclohexene, 1-methyl-4-	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

### Chronic hazards to the aquatic environment:

(1-methylethenyl)-, (4R)-

Fish Product:	No data available.
Specified substance(s): White mineral oil (petroleum)	NOAEL (Oncorhynchus mykiss): >= 1,000 mg/l QSAR QSAR, Supporting study
Aquatic Invertebrates Product:	No data available.
Specified substance(s): White mineral oil (petroleum)	NOAEL (Daphnia magna): >= 1,000 mg/l QSAR QSAR, Supporting study
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
Toxicity to Aquatic Plants Product:	No data available.
Persistence and Degradability	
Biodegradation Product:	No data available.

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<b>Specified substance(s):</b> White mineral oil (petroleum)	31 % (28 d) Detected in water. Read-across from supporting substance (structural analogue or surrogate), Supporting study
Butane	100 % (385.5 h) Detected in water. Experimental result, Key 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
Cyclohexene, 1-methyl-4- (1-methylethenyl)-, (4R)-	80 % (28 d) Detected in water. Read-across from supporting substance (structural analogue or surrogate), Key study
BOD/COD Ratio Product:	No data available.
Bioaccumulative potential Bioconcentration Factor (BC Product:	<b>CF)</b> No data available.
Specified substance(s): Cyclohexene, 1-methyl-4- (1-methylethenyl)-, (4R)-	Bioconcentration Factor (BCF): 864.8 Aquatic sediment QSAR, Key study
Partition Coefficient n-octanol / w Product:	<b>vater (log Kow)</b> No data available.
<b>Specified substance(s):</b> Cyclohexene, 1-methyl-4- (1-methylethenyl)-, (4R)-	Log Kow: 4.34 - 4.46 25 °C No Experimental result, Supporting study
Mobility in soil:	No data available.
Known or predicted distribu White mineral oil (petroleum) Butane Propane Cyclohexene, 1-methyl-4- (1-methylethenyl)-, (4R)-	tion to environmental compartments No data available. No data available. No data available. No data available.
Other adverse effects:	Harmful to aquatic organisms.
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	
DOT UN Number: UN Proper Shipping Name: Transport Hazard Class(es) Class: Label(s):	UN 1950 Aerosols, flammable 2.1 –
Packing Group: Marine Pollutant:	ll No
Environmental Hazards: Marine Pollutant	No No
Special precautions for user:	Not regulated.



IMDG UN Number: UN Proper Shipping Name: Transport Hazard Class(es) Class: Label(s): EmS No.:	UN 1950 Aerosols, flammable 2 -
Packing Group:	-
Environmental Hazards: Marine Pollutant	No No
Special precautions for user:	Not regulated.
IATA UN Number: Proper Shipping Name: Transport Hazard Class(es): Class: Label(s):	UN 1950 Aerosols, flammable 2.1 –
Packing Group:	_
Environmental Hazards: Marine Pollutant	No No
Special precautions for user:	Not regulated.

### 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)

Chemical Identity	OSHA hazard(s)
Ethylene Oxide	Eye irritation
	respiratory tract irritation
	Skin irritation
	Skin sensitization
	Acute toxicity
	Cancer
	Central nervous system
	Reproductive toxicity
	Mutagenicity
	Flammability
	-

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

Chemical Identity	<b>Reportable quantity</b>
Butane	lbs. 100
Propane	lbs. 100
Sodium nitrite, Nitrous	lbs. 100
acid, sodium salt (1:1)	
Ammonium hydroxide	lbs. 1000
((NH4)(OH))	
Ethylene Oxide	lbs. 10
1,4-Dioxane	lbs. 100
Acetic acid	lbs. 5000



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

### Hazard categories

Fire Hazard Immediate (Acute) Health Hazards Flammable aerosol Skin sensitizer Aspiration Hazard

#### SARA 302 Extremely Hazardous Substance

	<u>Reportable</u>
Chemical Identity	quantity
Ethylene Oxide	lbs. 10

Threshold Planning Quantity lbs. 1000

### SARA 304 Emergency Release Notification

Chemical Identity	<b>Reportable quantity</b>
Butane	lbs. 100
Propane	lbs. 100
Sodium nitrite, Nitrous	lbs. 100
acid, sodium salt (1:1)	
Ammonium hydroxide	lbs. 1000
((NH4)(OH))	
Ethylene Oxide	lbs. 10
1,4-Dioxane	lbs. 100
Acetic acid	lbs. 5000

### SARA 311/312 Hazardous Chemical

Chemical Identity	Threshold Planning Quantity
Ethylene Oxide	lbs
White mineral oil	10000 lbs
(petroleum)	
Butane	10000 lbs
Propane	10000 lbs
Cyclohexene, 1-methyl-4-	10000 lbs
(1-methylethenyl)-, (4R)-	
Silica	10000 lbs
Ammonium hydroxide	10000 lbs
((NH4)(OH))	
1,4-Dioxane	10000 lbs
Acetic acid	10000 lbs

#### SARA 313 (TRI Reporting)

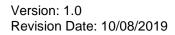
None present or none present in regulated quantities.

### 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**

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

Ethylene Oxide	Female reproductive toxin. 03 2008
Ethylene Oxide	Carcinogenic. 05 2011
Ethylene Oxide	Male reproductive toxin. 08 2009
Ethylene Oxide	Developmental toxin. 08 2009
1,4-Dioxane	Carcinogenic. 05 2011





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

### **Chemical Identity**

White mineral oil (petroleum) Butane Propane Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)-

### US. Massachusetts RTK - Substance List

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

### US. Pennsylvania RTK - Hazardous Substances

<u>Chemical Identity</u> White mineral oil (petroleum) Butane 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



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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:	Not in compliance with the inventory.
China Inv. Existing Chemical Substances:	On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	On or in compliance with the inventory
US TSCA Inventory:	Not 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:	Not 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

Issue Date:	10/08/2019
Revision Information:	No data available.
Version #:	1.0
Further Information:	No data available.
Disclaimer:	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.