

SAFETY DATA SHEET

Carterclene

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

1. Identification

Product identifier

Product name Carterclene
Product number CTC, ECTC05L, ZE

Recommended use of the chemical and restrictions on use

Application Cleaning agent.
Uses advised against No specific uses advised against are identified.

Details of the supplier of the safety data sheet

Supplier

ELECTROLUBE. A division of HK WENTWORTH LTD
HK WENTWORTH-AMERICA
PO BOX 271347
FLOWER MOUND
TEXAS 75027
USA
info@hkw.us.com

Emergency telephone number

Emergency telephone +1 202 464 2554 (USA only)
+44 1235 239670

2. Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified
Health hazards Not Classified
Environmental hazards Aquatic Acute 3 - H402

Label elements

Hazard statements H402 Harmful to aquatic life.
Precautionary statements P273 Avoid release to the environment.
P501 Dispose of contents/ container in accordance with national regulations.

Other hazards

This product does not contain any substances classified as PBT or vPvB.

3. Composition/information on ingredients

Mixtures

Carterclene

Propan-2-ol	1-5%
CAS number: 67-63-0	
Classification	
Flam. Liq. 2 - H225	
Eye Irrit. 2A - H319	
STOT SE 3 - H336	
2-Butoxyethanol	1-5%
CAS number: 111-76-2	
Classification	
Acute Tox. 4 - H302	
Acute Tox. 4 - H312	
Acute Tox. 4 - H332	
Skin Irrit. 2 - H315	
Eye Irrit. 2A - H319	
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	1-5%
CAS number: —	
Classification	
Asp. Tox. 1 - H304	
2-Aminoethanol	<1%
CAS number: 141-43-5	
Classification	
Acute Tox. 4 - H302	
Acute Tox. 4 - H312	
Acute Tox. 4 - H332	
Skin Corr. 1B - H314	
STOT SE 3 - H335	
Aquatic Chronic 3 - H412	
Ammonia 10 - <25%	<1%
CAS number: 1336-21-6	
M factor (Acute) = 1	
Classification	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
STOT SE 3 - H335	
Aquatic Acute 1 - H400	

Carterclene

Benzyl-C12-14-alkyldimethylammonium chlorides	<1%
CAS number: —	
M factor (Acute) = 10	M factor (Chronic) = 1
Classification Acute Tox. 4 - H302 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	
Pin-2(3)-ene	<1%
CAS number: 80-56-8	
Classification Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Skin Sens. 1B - H317 Asp. Tox. 1 - H304	
Sodium hydroxide	<1%
CAS number: 1310-73-2	
Classification Skin Corr. 1A - H314 Eye Dam. 1 - H318	
Citral	<1%
CAS number: 5392-40-5	
Classification Skin Irrit. 2 - H315 Eye Irrit. 2A - H319 Skin Sens. 1B - H317	
2,6-Di-tert-butyl-p-cresol	<1%
CAS number: 128-37-0	
M factor (Acute) = 1	M factor (Chronic) = 1
Classification Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	

Carterclene

Pin-2(10)-ene <1% CAS number: 127-91-3 M factor (Acute) = 1 M factor (Chronic) = 1
Classification Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Skin Sens. 1B - H317 Asp. Tox. 1 - H304 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410
Ethanol <1% CAS number: 64-17-5
Classification Flam. Liq. 2 - H225

The full text for all hazard statements is displayed in Section 16.

4. First-aid measures

Description of first aid measures

General information	Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.
Ingestion	Rinse mouth thoroughly with water. Remove any dentures. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.
Skin Contact	Remove affected person from source of contamination. Rinse immediately with plenty of water.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.

Most important symptoms and effects, both acute and delayed

General information	See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion	Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.
Skin contact	Prolonged contact may cause dryness of the skin.
Eye contact	May cause temporary eye irritation.

Indication of immediate medical attention and special treatment needed

Carterclene

Notes for the doctor	Treat symptomatically.
Specific treatments	No special treatment required.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

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

Special hazards arising from the substance or mixture

Specific hazards Containers can burst violently or explode when heated, due to excessive pressure build-up.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapors. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapors and protect men stopping the leak. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage.

Environmental precautions

Environmental precautions Avoid discharge to the aquatic environment. Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

Methods for cleaning up Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Reuse or recycle products wherever possible. Approach the spillage from upwind. Small Spillages: If the product is soluble in water, dilute the spillage with water and mop it up. Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. Large Spillages: If leakage cannot be stopped, evacuate area. Flush spilled material into an effluent treatment plant, or proceed as follows. Contain and absorb spillage with sand, earth or other non-combustible material. Place waste in labeled, sealed containers. Clean contaminated objects and areas thoroughly, observing environmental regulations. The contaminated absorbent may pose the same hazard as the spilled material. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Carterclene

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

7. Handling and storage

Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimize spills. Keep container tightly sealed when not in use. Avoid the formation of mists. Avoid discharge to the aquatic environment.

Advice on general occupational hygiene Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

Conditions for safe storage, including any incompatibilities

Storage precautions Store away from incompatible materials (see Section 10). Store in accordance with local regulations.

Storage class Chemical storage.

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.

8. Exposure Controls/personal protection

Control parameters

Occupational exposure limits

Propan-2-ol

Long-term exposure limit (8-hour TWA): OSHA 400 ppm 980 mg/m³
 Long-term exposure limit (8-hour TWA): ACGIH 200 ppm 492 mg/m³
 Short-term exposure limit (15-minute): ACGIH 400 ppm 984 mg/m³
 A4

2-Butoxyethanol

Long-term exposure limit (8-hour TWA): OSHA 50 ppm 240 mg/m³
 Sk
 Long-term exposure limit (8-hour TWA): ACGIH 20 ppm 97 mg/m³
 A3

2-Aminoethanol

Long-term exposure limit (8-hour TWA): OSHA 3 ppm 6 mg/m³
 Long-term exposure limit (8-hour TWA): ACGIH 3 ppm 7.5 mg/m³
 Short-term exposure limit (15-minute): ACGIH 6 ppm 15 mg/m³

Pin-2(3)-ene

Long-term exposure limit (8-hour TWA): ACGIH 20 ppm 112 mg/m³
 A4, DSens

Sodium hydroxide

Ceiling exposure limit: ACGIH 2 mg/m³
 Long-term exposure limit (8-hour TWA): OSHA 2 mg/m³

Citral

Long-term exposure limit (8-hour TWA): ACGIH 5 ppm 32 mg/m³ inhalable fraction and vapor
 A4, DSens, Sk

2,6-Di-tert-butyl-p-cresol

Carterclene

Long-term exposure limit (8-hour TWA): ACGIH 2 mg/m³ inhalable fraction and vapor
A4

Pin-2(10)-ene

Long-term exposure limit (8-hour TWA): ACGIH 20 ppm 112 mg/m³
A4, DSens

Ethanol

Long-term exposure limit (8-hour TWA): OSHA 1000 ppm 1900 mg/m³
Short-term exposure limit (15-minute): ACGIH 1000 ppm 1880 mg/m³
A3

OSHA = Occupational Safety and Health Administration.
ACGIH = American Conference of Governmental Industrial Hygienists.
Sk = Danger of cutaneous absorption.
A4 = Not Classifiable as a Human Carcinogen.
DSens = Dermal sensitizer.
A3 = Confirmed Animal Carcinogen with Unknown Relevance to Humans.

Propan-2-ol (CAS: 67-63-0)

Immediate danger to life and health 2000 ppm

2-Butoxyethanol (CAS: 111-76-2)

Immediate danger to life and health 700 ppm

2-Aminoethanol (CAS: 141-43-5)

Immediate danger to life and health 30 ppm

Sodium hydroxide (CAS: 1310-73-2)

Immediate danger to life and health 10 mg/m³

Ethanol (CAS: 64-17-5)

Immediate danger to life and health 3300 ppm

Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Good general ventilation should be adequate to control worker exposure to airborne contaminants.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with OSHA 1910.133. The following protection should be worn: Chemical splash goggles.

Carterclene

Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with OSHA 1910.138 and be demonstrated to be impervious to the chemical and resist degradation. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.
Other skin and body protection	Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.
Hygiene measures	Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.
Respiratory protection	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn.
Environmental exposure controls	Not regarded as dangerous for the environment.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Liquid.
Color	Colorless.
Odor	Fruity.
pH	pH (concentrated solution): 11-12
Melting point	Not available.
Initial boiling point and range	> 100°C/212°F
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Bulk density	0.97 kg/l
Solubility(ies)	Not available.
Partition coefficient	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	Not available.

Carterclene

Explosive properties	Not considered to be explosive.
Oxidizing properties	Does not meet the criteria for classification as oxidizing.

10. Stability and reactivity

Reactivity	See the other subsections of this section for further details.
Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
Possibility of hazardous reactions	No potentially hazardous reactions known.
Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.
Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

11. Toxicological information

Information on toxicological effects

Toxicological effects	Not regarded as a health hazard under current legislation.
<u>Acute toxicity - oral</u>	
Notes (oral LD₅₀)	Based on available data the classification criteria are not met.
ATE oral (mg/kg)	145,427.93
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.
ATE dermal (mg/kg)	91,621.26
<u>Acute toxicity - inhalation</u>	
Notes (inhalation LC₅₀)	Based on available data the classification criteria are not met.
ATE inhalation (vapours mg/l)	916.21
<u>Skin corrosion/irritation</u>	
Animal data	Based on available data the classification criteria are not met.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Based on available data the classification criteria are not met.
<u>Respiratory sensitization</u>	
Respiratory sensitization	Based on available data the classification criteria are not met.
<u>Skin sensitization</u>	
Skin sensitization	Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	Based on available data the classification criteria are not met.

Carterclene

IARC carcinogenicity	Contains a substance/a group of substances which may cause cancer. IARC Group 1 Carcinogenic to humans.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.
<u>Aspiration hazard</u>	
Aspiration hazard	Based on available data the classification criteria are not met.
General information	
	No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion	Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.
Skin Contact	Prolonged contact may cause dryness of the skin.
Eye contact	May cause temporary eye irritation.
Route of entry	Ingestion Inhalation Skin and/or eye contact
Target Organs	No specific target organs known.

Propan-2-ol

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ 5840 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data Primary dermal irritation index: 0 REACH dossier information. Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Dose: 0.1 mL, 1 second, Rabbit Causes serious eye irritation.

Skin sensitization

Skin sensitization Buehler test - Guinea pig: Not sensitizing. REACH dossier information. Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Genotoxicity - in vivo Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Carterclene

Carcinogenicity

Carcinogenicity NOAEL 5000 ppm, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.

IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.

Specific target organ toxicity - single exposure

STOT - single exposure STOT SE 3 - H336 May cause drowsiness or dizziness.

Target organs Central nervous system

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEC 5000 ppm, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.

2-Butoxyethanol

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,746.0

Species Rat

Notes (oral LD₅₀) REACH dossier information. Harmful if swallowed.

ATE oral (mg/kg) 1,746.0

Acute toxicity - dermal

Notes (dermal LD₅₀) Harmful in contact with skin.

ATE dermal (mg/kg) 1,100.0

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Harmful if inhaled.

ATE inhalation (vapours mg/l) 11.0

Skin corrosion/irritation

Animal data Dose: 0.5 mL, 4 hours, Rabbit Erythema/eschar score: Well defined erythema (2). Oedema score: No oedema (0). REACH dossier information. Irritating.

Serious eye damage/irritation

Serious eye damage/irritation Dose: 0.1 mL, 24 hours, Rabbit Causes serious eye irritation.

Skin sensitization

Skin sensitization Guinea pig maximization test (GPMT) - Guinea pig: Not sensitizing. REACH dossier information. Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Genotoxicity - in vivo Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Carcinogenicity

Carterclene

Carcinogenicity	NOAEC 125 ppm, Inhalation, Mouse REACH dossier information. Based on available data the classification criteria are not met.
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Two-generation study - NOAEL 720 mg/kg/day, Oral, Mouse P REACH dossier information. Based on available data the classification criteria are not met.
Reproductive toxicity - development	Maternal toxicity: - NOAEL: 50 ppm, Inhalation, Rabbit REACH dossier information. Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	NOAEL <69 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics</u>	
<u>Acute toxicity - oral</u>	
Notes (oral LD₅₀)	LD ₅₀ 15000 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	LD ₅₀ 3160 mg/kg, Dermal, Rabbit REACH dossier information. Based on available data the classification criteria are not met.
<u>Acute toxicity - inhalation</u>	
Notes (inhalation LC₅₀)	LC ₅₀ 4951 mg/l, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Skin corrosion/irritation</u>	
Animal data	Dose: 0.5 mL, 4 hours, Rabbit Erythema/eschar score: Well defined erythema (2). Oedema score: Very slight oedema - barely perceptible (1). REACH dossier information. Repeated exposure may cause skin dryness or cracking.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Dose: 0.1 mL, 1 second, Rabbit REACH dossier information. Based on available data the classification criteria are not met.
<u>Skin sensitization</u>	
Skin sensitization	Guinea pig maximization test (GPMT) - Guinea pig: Not sensitizing. REACH dossier information. Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	NOAEC 1100 mg/m ³ , Inhalation, Mouse REACH dossier information. Based on available data the classification criteria are not met.
<u>Reproductive toxicity</u>	

Carterclene

Reproductive toxicity - fertility Fertility, One-generation study - NOAEL 750 mg/kg/day, Oral, Rat F1 REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity - development Maternal toxicity: - NOAEL: >5220 mg/m³, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEC >10400 mg/m³, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard 2.4 cSt @ 20°C Aspiration hazard if swallowed.

2-Aminoethanol

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,515.0

Species Rat

Notes (oral LD₅₀) REACH dossier information. Harmful if swallowed.

ATE oral (mg/kg) 1,515.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 1,025.0

Species Rabbit

Notes (dermal LD₅₀) IUCLID Harmful in contact with skin.

ATE dermal (mg/kg) 1,025.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ dust/mist mg/l) 1.3

Species Rat

Notes (inhalation LC₅₀) Supplier's information. Harmful if inhaled.

ATE inhalation (dusts/mists mg/l) 1.3

Skin corrosion/irritation

Animal data Dose: 0.5 mL, 4 hours, Erythema/eschar score: Severe erythema (beef redness) to eschar formation preventing grading of erythema (4). REACH dossier information. Corrosive.

Serious eye damage/irritation

Serious eye damage/irritation Dose: 0.005 mL, 10 seconds, Rabbit Causes serious eye damage.

Skin sensitization

Skin sensitization Guinea pig maximization test (GPMT) - Guinea pig: Not sensitizing. REACH dossier information. Based on available data the classification criteria are not met.

Carterclene

Germ cell mutagenicity

Genotoxicity - in vitro Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Genotoxicity - in vivo Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Two-generation study - NOAEL 1000 ppm, Oral, Rat F1 REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity - development Maternal toxicity: - NOAEL: 120 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure STOT SE 3 - H335 May cause respiratory irritation.

Target organs Respiratory system, lungs

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEC 10 mg/m³, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.

Benzyl-C12-14-alkyldimethylammonium chlorides

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 795.0

Species Rat

Notes (oral LD₅₀) REACH dossier information. Based on available data the classification criteria are not met.

ATE oral (mg/kg) 795.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ 3412.5 mg/kg, Dermal, Rabbit REACH dossier information. Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data Dose: 0.5 mL, 4 hours, Rabbit REACH dossier information. Corrosive.

Serious eye damage/irritation

Serious eye damage/irritation Corrosive to skin. Corrosivity to eyes is assumed.

Skin sensitization

Skin sensitization Buehler test - Guinea pig: Not sensitizing. REACH dossier information. Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Carcinogenicity

Carterclene

Carcinogenicity NOAEL >2000 ppm, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Two-generation study - NOAEL 61 mg/kg/day, Oral, Rat P REACH dossier information. Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard Not relevant. Solid.

Pin-2(3)-ene

Skin corrosion/irritation

Human skin model test Cell Viability 39.6% 15 minutes REACH dossier information. Irritating.

Serious eye damage/irritation

Serious eye damage/irritation Dose: 0.1 mL, 8 days, Rabbit Based on available data the classification criteria are not met.

Skin sensitization

Skin sensitization Local Lymph Node Assay (LLNA) - Mouse: Sensitizing. REACH dossier information.

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Genotoxicity - in vivo Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard Aspiration hazard if swallowed.

Sodium hydroxide

Skin corrosion/irritation

Skin corrosion/irritation Corrosive to skin.

Serious eye damage/irritation

Serious eye damage/irritation Corrosive to skin. Corrosivity to eyes is assumed.

Skin sensitization

Skin sensitization Patch test - Human: Not sensitizing. REACH dossier information. Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard Not relevant. Solid.

Citral

Acute toxicity - oral

Carterclene

Notes (oral LD₅₀)	LD ₅₀ 6800 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	LD ₅₀ >2000 mg/kg, Dermal, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Skin corrosion/irritation</u>	
Animal data	Dose: 0.5 mL, 15 minutes, Rabbit Erythema/eschar score: Well defined erythema (2). Oedema score: Slight oedema - edges of area well defined by definite raising (2). REACH dossier information. Highly irritating.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Dose: 0.1 mL, 8 days, Rabbit Causes serious eye irritation.
<u>Skin sensitization</u>	
Skin sensitization	Guinea pig maximization test (GPMT) - Guinea pig: Sensitizing. REACH dossier information.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	NOAEL 100 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Screening - NOAEL 1000 mg/kg/day, Oral, Rat P REACH dossier information. Based on available data the classification criteria are not met.
Reproductive toxicity - development	- NOAEL: 200 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>2,6-Di-tert-butyl-p-cresol</u>	
Toxicological effects	Not regarded as a health hazard under current legislation.
<u>Acute toxicity - oral</u>	
Notes (oral LD₅₀)	LD ₅₀ >2930 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	LD ₅₀ >2000 mg/kg, Dermal, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Skin corrosion/irritation</u>	
Animal data	Dose: 0.5 mL, 24 hours, Rabbit Erythema/eschar score: Very slight erythema - barely perceptible (1). Oedema score: No oedema (0). REACH dossier information. Based on available data the classification criteria are not met.
<u>Serious eye damage/irritation</u>	

Carterclene

Serious eye damage/irritation	Dose: 100 mg, 72 hours, Rabbit REACH dossier information. Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	NOAEL 25 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Two-generation study - NOAEL 500 mg/kg/day, Oral, Rat P REACH dossier information. Based on available data the classification criteria are not met.
Reproductive toxicity - development	- NOAEL: 100 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	NOAEL 25 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Pin-2(10)-ene

<u>Skin corrosion/irritation</u>	
Human skin model test	Cell Viability 38.5% 15 minutes REACH dossier information. Irritating.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Dose: 0.1 mL, 8 days, Rabbit Based on available data the classification criteria are not met.
<u>Skin sensitization</u>	
Skin sensitization	Local Lymph Node Assay (LLNA) - Mouse: Sensitizing. REACH dossier information.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.
<u>Reproductive toxicity</u>	
Reproductive toxicity - development	- NOAEL: 250 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Aspiration hazard</u>	
Aspiration hazard	Aspiration hazard if swallowed.

Ethanol

Toxicological effects	Not regarded as a health hazard under current legislation.
------------------------------	--

Carterclene

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 10470 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LD₅₀ 124.7 mg/l, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data Dose: 0.2 mL, 24 hours, Rabbit Primary dermal irritation index: 0 REACH dossier information. Based on available data the classification criteria are not met.

Skin sensitization

Skin sensitization Local Lymph Node Assay (LLNA) - Mouse: Not sensitizing. REACH dossier information. Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Genotoxicity - in vivo Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Carcinogenicity

IARC carcinogenicity IARC Group 1 Carcinogenic to humans.

Reproductive toxicity

Reproductive toxicity - fertility Two-generation study - NOEL 15% , Oral, Mouse REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity - development Maternal toxicity: - NOEL: 16000 ppm, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure LOAEL ~4000 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

12. Ecological Information

Ecotoxicity Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

Toxicity Based on available data the classification criteria are not met.

Propan-2-ol

Toxicity Aquatic toxicity is unlikely to occur. Based on available data the classification criteria are not met.

Acute toxicity - fish LC₅₀, 96 hours: 10000 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates LC₅₀, 24 hours: >10000 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 7 days: 1800 mg/l, Scenedesmus quadricauda

Carterclene

2-Butoxyethanol

Toxicity	Aquatic toxicity is unlikely to occur. Based on available data the classification criteria are not met.
Acute toxicity - fish	LC ₅₀ , 96 hours: 1474 mg/l, Onchorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 1550 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 911 mg/l, Pseudokirchneriella subcapitata
Chronic toxicity - fish early life stage	NOEL, 21 days: >100 mg/l, Brachydanio rerio (Zebra Fish)
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 100 mg/l, Daphnia magna

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

Toxicity	Aquatic toxicity is unlikely to occur. Based on available data the classification criteria are not met.
Acute toxicity - fish	LL ₅₀ , 96 hours: >1000 mg/l, Onchorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EL ₅₀ , 48 hours: >10000 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EL ₅₀ , 72 hours: >1000 mg/l, Pseudokirchneriella subcapitata
Chronic toxicity - fish early life stage	NOELR, 28 days: 0.173 mg/l, Onchorhynchus mykiss (Rainbow trout), Estimated value.
Chronic toxicity - aquatic invertebrates	NOELR, 21 days: 1.22 mg/l, Daphnia magna, Estimated value.

2-Aminoethanol

Toxicity	Based on available data the classification criteria are not met.
Acute toxicity - fish	LC ₅₀ , 96 hours: 349 mg/l, Cyprinus carpio (Common carp)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 65 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 2.8 mg/l, Pseudokirchneriella subcapitata
Acute toxicity - microorganisms	EC ₁₀ , 30 minutes: >1000 mg/l, Activated sludge
Chronic toxicity - fish early life stage	NOEC, 41 days: 1.24 mg/l, Oryzias latipes (Red killifish)
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 0.85 mg/l, Daphnia magna

Carterclene

Ammonia 10 - <25%

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Benzyl-C12-14-alkyldimethylammonium chlorides

Toxicity Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 Very toxic to aquatic life with long lasting effects.

Acute aquatic toxicity

LE(C)₅₀ 0.01 < L(E)C₅₀ ≤ 0.1

M factor (Acute) 10

Acute toxicity - fish LC₅₀, 96 hours: 0.85 mg/l, Onchorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates LC₅₀, 48 hours: 0.32 mg/l, Acartia tonsa

Acute toxicity - aquatic plants EC₅₀, 96 hours: 0.03 mg/l, Selenastrum capricornutum

Chronic aquatic toxicity

M factor (Chronic) 1

Short term toxicity - embryo and sac fry stages NOEC, 28 days: 0.032 mg/l, Pimephales promelas (Fat-head Minnow)

Chronic toxicity - aquatic invertebrates NOEC, 21 days: 0.0045 mg/l, Daphnia magna

Pin-2(3)-ene

Toxicity Aquatic toxicity is unlikely to occur.

Sodium hydroxide

Toxicity The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 40.4 mg/l, Ceriodaphnia dubia

Citral

Toxicity Based on available data the classification criteria are not met.

Acute toxicity - fish LC₅₀, 96 hours: 6.78 mg/l, Leuciscus idus (Golden orfe)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 6.8 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 103.8 mg/l, Scenedesmus subspicatus

Carterclene

2,6-Di-tert-butyl-p-cresol

Toxicity Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 Very toxic to aquatic life with long lasting effects.

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 0.48 mg/l, Daphnia magna

Chronic aquatic toxicity

M factor (Chronic) 1

Pin-2(10)-ene

Toxicity Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 Very toxic to aquatic life with long lasting effects.

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Acute toxicity - fish LC₅₀, 96 hours: 0.557 mg/l, Cyprinus carpio (Common carp)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 1.25 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 48 hours: 0.826 mg/l, Pseudokirchneriella subcapitata

Chronic aquatic toxicity

M factor (Chronic) 1

Ethanol

Toxicity Based on available data the classification criteria are not met.

Acute toxicity - fish LC₅₀, 96 hours: 14200 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates LC₅₀, 48 hours: 5012 mg/l, Ceriodaphnia dubia

Acute toxicity - aquatic plants EC₅₀, 72 hours: 11.5 mg/l, Chlorella vulgaris

Chronic toxicity - aquatic invertebrates NOEC, 9 days: 9.6 mg/l, Daphnia magna

Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Propan-2-ol

Carterclene

Persistence and degradability	The substance is readily biodegradable.
Biodegradation	Water - Degradation 53%: 5 days
Biological oxygen demand	1.19-1.72 g O ₂ /g substance
Chemical oxygen demand	2.23 g O ₂ /g substance

2-Butoxyethanol

Persistence and degradability	The substance is readily biodegradable.
Biodegradation	Water - Degradation 90.4%: 28 days

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

Persistence and degradability	Readily biodegradable but failing the 10-day window.
Biodegradation	Water - Degradation ~5%: 3 days Water - Degradation 69%: 28 days

2-Aminoethanol

Phototransformation	Water - DT ₅₀ : 10.742 hours Estimated value.
Biodegradation	Water - Degradation >90%: 21 days

Benzyl-C12-14-alkyldimethylammonium chlorides

Persistence and degradability	The substance is readily biodegradable.
Phototransformation	Water - DT ₅₀ : 0.26 days
Stability (hydrolysis)	pH4 - Recovery 94.6%: 30 days @ 25°C pH7 - Recovery 94.4%: 30 days @ 25°C pH9 - Recovery 99.5%: 30 days @ 25°C
Biodegradation	Water - Degradation 95.5%: 28 days

Pin-2(3)-ene

Persistence and degradability	The product is biodegradable.
Phototransformation	Water - DT ₅₀ : 0.44-1.41 hours

Sodium hydroxide

Persistence and degradability	The product contains only inorganic substances which are not biodegradable.
--------------------------------------	---

Citral

Carterclene

Persistence and degradability	The substance is readily biodegradable.
Phototransformation	Water - DT ₅₀ : 37.35 minutes
Biodegradation	Water - Degradation 85-95%: 28 days

2,6-Di-tert-butyl-p-cresol

Persistence and degradability	Not readily biodegradable.
Phototransformation	Water - DT ₅₀ : 7 hours Estimated value.
Biodegradation	Water - Degradation 4.5%: 28 days

Pin-2(10)-ene

Persistence and degradability	The substance is readily biodegradable.
Biodegradation	Water - Degradation 76%: 28 days

Ethanol

Persistence and degradability	The substance is readily biodegradable.
Biodegradation	Water - Degradation 74%: 10 days
Chemical oxygen demand	1.99 g O ₂ /g substance

Bioaccumulative potential

Bio-Accumulative Potential	No data available on bioaccumulation.
Partition coefficient	Not available.

Propan-2-ol

Bio-Accumulative Potential	Bioaccumulation is unlikely.
-----------------------------------	------------------------------

2-Butoxyethanol

Bio-Accumulative Potential	Bioaccumulation is unlikely.
Partition coefficient	log K _{ow} : 0.81

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

Partition coefficient	Scientifically unjustified.
------------------------------	-----------------------------

2-Aminoethanol

Bio-Accumulative Potential	BCF: 2.3, Estimated value. Bioaccumulation is unlikely.
Partition coefficient	log P _{ow} : -1.91

Benzyl-C12-14-alkyldimethylammonium chlorides

Carterclene

Bio-Accumulative Potential BCF: 67.62, Estimated value. Bioaccumulation is unlikely.

Partition coefficient log Pow: 2.75

Pin-2(3)-ene

Bio-Accumulative Potential BCF: 1845, Estimated value. Bioaccumulation is unlikely.

Partition coefficient log Pow: 4.487

Sodium hydroxide

Bio-Accumulative Potential No data available on bioaccumulation.

Citral

Bio-Accumulative Potential BCF: 89.72, Estimated value. The product is not bioaccumulating.

Partition coefficient log Pow: 2.76

2,6-Di-tert-butyl-p-cresol

Bio-Accumulative Potential BCF: 330, Cyprinus carpio (Common carp)

Partition coefficient log Pow: 5.1

Pin-2(10)-ene

Bio-Accumulative Potential BCF: 383.1, Estimated value. Bioaccumulation is unlikely.

Partition coefficient log Pow: 4.425

Ethanol

Bio-Accumulative Potential Bioaccumulation is unlikely.

Partition coefficient log Pow: -0.35

Mobility in soil

Mobility No data available.

Propan-2-ol

Mobility The product is soluble in water.

2-Butoxyethanol

Mobility The product is miscible with water and may spread in water systems.

Surface tension 29.53 mN/m @ 20°C

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

Mobility The product has poor water-solubility.

2-Aminoethanol

Carterclene

Mobility The product is soluble in water.

Henry's law constant 0.000000118 Pa m³/mol @ 25°C

Benzyl-C12-14-alkyldimethylammonium chlorides

Mobility The product is soluble in water.

Henry's law constant 0.00000104 Pa m³/mol @ 25°C Estimated value.

Surface tension 28.27 mN/m @ 19.7°C

Pin-2(3)-ene

Mobility The product is insoluble in water.

Adsorption/desorption coefficient Water - Koc: 2184 @ 25°C Estimated value.

Sodium hydroxide

Mobility The product is soluble in water.

Citral

Mobility The product is partly soluble in water and may spread in the aquatic environment.

Adsorption/desorption coefficient Water - Log Koc: 2.169 @ 25°C Estimated value.

Henry's law constant 0.000376 atm m³/mol @ 25°C

2,6-Di-tert-butyl-p-cresol

Mobility The product is partly soluble in water and may spread in the aquatic environment.

Henry's law constant 0.342 Pa m³/mol @ 25°C

Pin-2(10)-ene

Mobility The product is partly soluble in water and may spread in the aquatic environment.

Adsorption/desorption coefficient Water - Koc: 2080 @ 25°C Estimated value.

Ethanol

Mobility The product is soluble in water.

Surface tension 24.5 mN/m @ 20°C/68°F

Other adverse effects

Other adverse effects None known.

13. Disposal considerations

Waste treatment methods

Carterclene

General information	The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.
Disposal methods	Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of the local water authority.

14. Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).

UN Number

Not applicable.

UN proper shipping name

Not applicable.

Transport hazard class(es)

No transport warning sign required.

Transport labels

No transport warning sign required.

DOT transport labels

No transport warning sign required.

Packing group

Not applicable.

Environmental hazards

Environmentally Hazardous Substance

No.

Special precautions for user

Not applicable.

DOT TIH Zone

Not applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed or exempt.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

The following ingredients are listed or exempt:

Carterclene

Ammonia 10 - <25%

Final CERCLA RQ: 1000(454) pounds (Kilograms)

Sodium hydroxide

Final CERCLA RQ: 1000(454) pounds (Kilograms)

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed or exempt.

SARA 313 Emission Reporting

The following ingredients are listed or exempt:

Ammonia 10 - <25%

1.0 %

2-Butoxyethanol

1.0 %

CAA Accidental Release Prevention

None of the ingredients are listed or exempt.

FDA - Essential Chemical

None of the ingredients are listed or exempt.

FDA - Precursor Chemical

None of the ingredients are listed or exempt.

SARA (311/312) Hazard Categories

None of the ingredients are listed or exempt.

OSHA Highly Hazardous Chemicals

None of the ingredients are listed or exempt.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

The following ingredients are listed or exempt:

7-Methyl-3-methyleneocta-1,6-diene

Known to the State of California to cause cancer.

California Air Toxics "Hot Spots" (A-I)

The following ingredients are listed or exempt:

Sodium hydroxide

2-Butoxyethanol

Propan-2-ol

California Air Toxics "Hot Spots" (A-II)

None of the ingredients are listed or exempt.

California Directors List of Hazardous Substances

The following ingredients are listed or exempt:

Ammonia 10 - <25%

2,6-Di-tert-butyl-p-cresol

Ethanol

2-Aminoethanol

Sodium hydroxide

Carterclene

2-Butoxyethanol

Propan-2-ol

Massachusetts "Right To Know" List

The following ingredients are listed or exempt:

Ammonia 10 - <25%

2,6-Di-tert-butyl-p-cresol

Octanal

Pin-2(3)-ene

Ethanol

2-Aminoethanol

Sodium hydroxide

2-Butoxyethanol

Propan-2-ol

Rhode Island "Right To Know" List

The following ingredients are listed or exempt:

2,6-Di-tert-butyl-p-cresol

Ethanol

2-Aminoethanol

Sodium hydroxide

2-Butoxyethanol

Propan-2-ol

Minnesota "Right To Know" List

The following ingredients are listed or exempt:

2,6-Di-tert-butyl-p-cresol

Ethanol

2-Aminoethanol

Sodium hydroxide

2-Butoxyethanol

Propan-2-ol

New Jersey "Right To Know" List

The following ingredients are listed or exempt:

Ammonia 10 - <25%

2,6-Di-tert-butyl-p-cresol

Pin-2(3)-ene

Ethanol

2-Aminoethanol

Sodium hydroxide

2-Butoxyethanol

Propan-2-ol

Carterclene

Pennsylvania "Right To Know" List

The following ingredients are listed or exempt:

Ammonia 10 - <25%

2,6-Di-tert-butyl-p-cresol

Pin-2(3)-ene

Ethanol

2-Aminoethanol

Sodium hydroxide

2-Butoxyethanol

Propan-2-ol

Inventories

US - TSCA

The following ingredients are listed or exempt:

Water

Ammonia 10 - <25%

p-Mentha-1,3-diene

Caryophyllene

7-Methyl-3-methyleneocta-1,6-diene

p-Mentha-1,4-diene

2,6-Di-tert-butyl-p-cresol

Nonanal

Pin-2(10)-ene

2-Methylundecanal

Octanal

Geraniol

Linalool

Citronellol

Camphene

Geranyl acetate

p-Menth-1-en-8-ol

Linalyl acetate

Citral

Pin-2(3)-ene

d-Limonene

Fatty alcohol ethoxylate

Ethanol

Alcohol C9-11, ethoxylated

Fatty acids, C16-18 and C18-unsatd.

2-Aminoethanol

Sodium hydroxide

2-Butoxyethanol

Carterclene

Propan-2-ol

(2-Hydroxyethyl)dimethyl[3-[(1-oxooctadecyl)amino]propyl]ammonium nitrate

US - TSCA 12(b) Export Notification

None of the ingredients are listed or exempt.

16. Other information

Training advice	Read and follow manufacturer's recommendations. Only trained personnel should use this material.
Issued by	Bethan Massey
Revision date	1/18/2017
Revision	0
SDS No.	824
Hazard statements in full	<p>H225 Highly flammable liquid and vapor. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H318 Causes serious eye damage. H319 Causes serious eye irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H400 Very toxic to aquatic life. H402 Harmful to aquatic life. H410 Very toxic to aquatic life with long lasting effects.</p>

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.