

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code:	CRESTE-002-BULK	
Product Name:	Citrus 90	
Company Name:	Crestek Cleaning Center 1161 Kapiolani Boulevard Honolulu, HI 96814	Phone Number: +1 (808)942-2500
Emergency Contact:	CHEMTEL	+1 (888)255-3924

2. HAZARDS IDENTIFICATION

Flammable Liquids, Category 3
Skin Corrosion/Irritation, Category 2
Skin Sensitization, Category 1
Aquatic Toxicity (Chronic), Category 1
Acute Toxicity: Oral, Category 5



GHS Signal Word:	Warning
GHS Hazard Phrases:	Flammable liquid and vapor. May be harmful if swallowed. Causes skin irritation. May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects.
GHS Precautionary Phrases:	Keep out of reach of children. Read label before use. Keep container tightly closed. Avoid breathing mist/vapors/spray. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
GHS Response Phrases:	IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with plenty of water for 15 minutes. Get immediate medical advice/attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get immediate medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for 15 minutes. Get immediate medical advice/attention. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get immediate medical advice/attention.
GHS Storage and Disposal Phrases:	Store in cool/well-ventilated place. Dispose of contents/container to ...
OSHA Regulatory Status:	This material is classified as hazardous under OSHA regulations.

Potential Health Effects (Acute and Chronic): Hazards not otherwise classified (HNOC) or not covered by GHS -none.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
5989-27-5	d-Limonene	<80.0 %
34398-01-1	Poly(oxy-1,2-ethanediyl),.alpha.-undecyl-.omega.-hydroxy-	<10.0 %
112-34-5	Diethylene glycol monobutyl ether	<15.0 %

4. FIRST AID MEASURES

Emergency and First Aid Procedures:	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
In Case of Inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In Case of Skin Contact:	Wash off with soap and plenty of water. Consult a physician.
In Case of Eye Contact:	Flush eyes with water as a precaution.
In Case of Ingestion:	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Indication of any immediate medical attention and special treatment needed:	No data available.

5. FIRE FIGHTING MEASURES

Flash Pt:	> 50.00 C
Explosive Limits:	LEL: No data. UEL: No data.
Autoignition Pt:	No data.
Suitable Extinguishing Media:	Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.
Fire Fighting Instructions:	Wear self contained breathing apparatus for fire fighting if necessary. Further information.
Flammable Properties and Hazards:	No data available.
Hazardous Combustion Products:	No data available.

6. ACCIDENTAL RELEASE MEASURES

Protective Precautions, Protective Equipment and Emergency Procedures:	Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.
Environmental Precautions:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
Steps To Be Taken In Case Material Is Released Or Spilled:	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

7. HANDLING AND STORAGE

- Precautions To Be Taken in Handling:** Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.
- Precautions To Be Taken in Storing:** Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
- Other Precautions:** Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
5989-27-5	d-Limonene	No data.	No data.	No data.
34398-01-1	Poly(oxy-1,2-ethanediyl),.alpha.-undecy l-.omega.-hydroxy-	No data.	No data.	No data.
112-34-5	Diethylene glycol monobutyl ether	No data.	No data.	No data.

Respiratory Equipment (Specify Type): Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls.

If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eye Protection: Face shield and safety glasses.

Protective Gloves: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full contact.
Material: Nitrile rubber, Minimum layer thickness: 0.4 mm, Break through time: 480 min. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Other Protective Clothing: Complete suit protecting against chemicals. Flame retardant antistatic protective clothing.

Engineering Controls (Ventilation etc.): Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Environmental Exposure Controls: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States: [] Gas [X] Liquid [] Solid

Appearance and Odor: Clear.
Orange.

pH: No data.

Melting Point: -74.30 C

Boiling Point: 176.00 C - 177.00 C

Flash Pt: > 50.00 C

Evaporation Rate: No data.

Flammability (solid, gas): No data available.

Explosive Limits: LEL: No data. UEL: No data.

Vapor Pressure (vs. Air or mm Hg): No data.

Vapor Density (vs. Air = 1): No data.

Specific Gravity (Water = 1): No data.

Density: 0.860 - 0.870 G/CM3

Solubility in Water: No data.

Octanol/Water Partition Coefficient: No data.

Autoignition Pt: No data.

Decomposition Temperature: No data.

Viscosity: No data.

10. STABILITY AND REACTIVITY

Reactivity: No data available.

Stability: Unstable [] Stable [X]

Conditions To Avoid - Instability: No data available.

Incompatibility - Materials To Avoid: Strong oxidizing agents.

Hazardous Decomposition or Byproducts: No data available.

Possibility of Hazardous Reactions: Will occur [] Will not occur [X]

Conditions To Avoid - Hazardous Reactions: No data available.

11. TOXICOLOGICAL INFORMATION

Toxicological Information: Epidemiology: No data available.
Teratogenicity: No data available.
Reproductive Effects: No data available.
Mutagenicity: No data available.
Neurotoxicity: No data available.

CAS# 5989-27-5: d-Limonene: Acute toxicity, LD50, Oral, Rat, 4400. MG/KG.
Acute toxicity, LD50, Skin, Species: Rabbit, > 5.000 GM/KG.
CAS# 34398-01-1: Poly(oxy-1,2-ethanediyl),.alpha.-undecyl-.omega.-hydroxy-: Acute toxicity, LD50, Oral, Rat, 1000. - 2000. MG/KG.

Irritation or Corrosion: Other Studies: CAS# 112-34-5:
Acute toxicity, LD50, Oral, Rat, 5660 mg/kg

Other Studies: CAS# 112-34-5:
Standard Draize Test, Eyes, Species: Rabbit, 20.0 mg, 24 H

Sensitization: Other Studies: CAS# 5989-27-5:
Acute toxicity, LD50, Oral, Rat, 4400 mg/kg
Acute toxicity, LD50, Skin, Rabbit, 5gm/kg

Mouse.
Result: Tumorigenic:Tumors at site or application. May cause sensitisation by skin contact.

Carcinogenicity/Other Information: IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Carcinogenicity:		NTP? No	IARC Monographs? No	OSHA Regulated? No		
CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA	
5989-27-5	d-Limonene	n.a.	3	n.a.	n.a.	
34398-01-1	Poly(oxy-1,2-ethanediyl),.alpha.-undecyl-.omega.-hydroxy-	n.a.	n.a.	n.a.	n.a.	
112-34-5	Diethylene glycol monobutyl ether	n.a.	n.a.	n.a.	n.a.	

12. ECOLOGICAL INFORMATION

General Ecological Information:	Environmental: No information available. Physical: No information available.
Results of PBT and vPvB assessment:	<p>CAS# 5989-27-5: d-Limonene: LC50, Fathead Minnow (Pimephales promelas), 600.0 - 800.0 UG/L, 24 H, Mortality. Effective concentration to 50% of test organisms., Water Flea (Daphnia magna), 421.0 UG/L, 48 H, Intoxication,.</p> <p>CAS# 34398-01-1: Poly(oxy-1,2-ethanediyl),.alpha.-undecyl-.omega.-hydroxy-: LC50, Fathead Minnow (Pimephales promelas), 7100. UG/L, 96 H, Mortality. Effective concentration to 50% of test organisms., Water Flea (Daphnia magna), 6700. UG/L, 48 H, Intoxication,.</p> <p>Other Studies: CAS# 112-34-5: LC50, Water Flea(Daphnia magna), 2850 mg/l, 24 H, Intoxication LC50, Carp (Leuciscus idus ssp. melanotus), 1805 mg/l, 48 H, Mortality</p> <p>Other Studies: CAS# 5989-27-5: LC50, Water Flea (Daphnia magna), 577 ug/l, 48 H, Mortality LC50, Fathead Minnow (Pimephales promelas), 600-800 ug/l, 24 H, Mortality</p> <p>Other Studies: SurfactantCAS# 34398-01-1: LC50, Fathead Minnow (Pimephales promelas), 3900 ug/L, 96H.</p>
Persistence and Degradability:	Biodegradability Result: 71 % - Readily biodegradable.
Bioaccumulative Potential:	No data available.
Mobility in Soil:	No data available.
Other adverse effects:	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:	Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.
-------------------------------	---

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name:	Terpene hydrocarbons, n.o.s. Limited Quantity (for container less than 1.3 gallon)
DOT Hazard Class:	3 FLAMMABLE LIQUID
UN/NA Number:	UN2319 Packing Group: III



15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
5989-27-5	d-Limonene	No	No	No
34398-01-1	Poly(oxy-1,2-ethanediyl),.alpha.-undecyl-.omega.-hydroxy-	No	No	No
112-34-5	Diethylene glycol monobutyl ether	No	No	Yes-Cat. N230

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

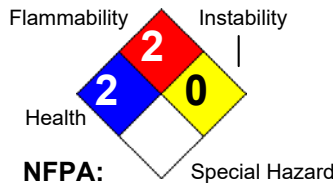
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Explosive	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Acute toxicity (any route of exposure)
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Flammable (gases, aerosols, liquid, or solid)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Skin Corrosion or Irritation
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Oxidizer (liquid, solid or gas)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Serious eye damage or eye irritation
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Self-reactive	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Respiratory or Skin Sensitization
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Pyrophoric (liquid or solid)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Germ cell mutagenicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Pyrophoric gas	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Carcinogenicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Self-heating	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Reproductive toxicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Organic peroxide	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Specific target organ toxicity (single or repeated exposure)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Corrosive to metal	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Aspiration Hazard
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Gas under pressure (compressed gas)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Simple Asphyxiant
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	In contact with water emits flammable gas	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	(Health) Hazard Not Otherwise Classified (HNOC)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Combustible Dust		
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	(Physical) Hazard Not Otherwise Classified (HNOC)		

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
5989-27-5	d-Limonene	CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NJ EHS: No; NY Part 597: No; PA HSL: No
34398-01-1	Poly(oxy-1,2-ethanediyl),.alpha.-undecyl-.omega.-hydroxy-	CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NJ EHS: No; NY Part 597: No; PA HSL: No
112-34-5	Diethylene glycol monobutyl ether	CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: Yes - Cat.; MA Oil/HazMat: No; MI CMR, Part 5: Yes - Cat.; NJ EHS: Yes - Cat.; NY Part 597: No; PA HSL: Yes - E(c)

16. OTHER INFORMATION

Revision Date: 10/29/2017

Hazard Rating System:



Additional Information About No data available.

This Product:

Company Policy or

Disclaimer:

While Crestek Cleaning Center believes the statements set forth herein are accurate as of the date hereof, Crestek Cleaning Center makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data is offered solely for your consideration, investigation, and verification.