

# MATERIAL SAFETY DATA SHEET

## SUTERRA LLC

20950 NE Talus Place, Bend, Oregon U.S.A. 97701

EMERGENCY PHONE NUMBER: (541) 388-3688

Section 1			
TRADE NAME:	PUFFER® CM		
SYNONYMS:	Codlure, Codlemone		
REGULATORY LICENSE:	EPA Registration No. 73479-2		
CHEMICAL FAMILY:	Unsaturated Aliphatic Ester		
SECTION II - COMPONENTS			
PRINCIPAL COMPONENT(S)	CAS NO.	CHEMICAL FORMULA	
E,E-8,10-dodecadien-1-ol	33956-49-9	C <sub>13</sub> H <sub>22</sub> O	
Ethanol	64-17-5	C <sub>2</sub> H <sub>3</sub> OH	
1,1,1,2-Tetrafluoroethane	811-97-2	C <sub>2</sub> H <sub>2</sub> F <sub>2</sub>	
SECTION III - PHYSICAL DATA			
BOILING POINT (°C)	78.5°C	BULK DENSITY	NA
VAPOR PRESSURE (mm Hg)	55-66 @ 20C	VAPOR DENSITY (AIR = 1)	>1
SOLUBILITY IN WATER	Low solubility in water.	MOLECULAR WEIGHT	N/A
SPECIFIC GRAVITY (H <sub>2</sub> O = 1)	0.96	APPEARANCE AND ODOR	Clear, slight yellow tint. Waxy odor.

<b>SECTION IV - FIRE AND EXPLOSION HAZARD DATA</b>			
FLASH POINT (Method Used)	FLAMMABLE LIMITS (% by Volume in Air)	LEL	UEL
>13°C (Closed Cup)	LFL=3.3 UFL=19	Not established	Not established.
EXTINGUISHING MEDIA: Dry Chemical, Foam, Carbon Dioxide (CO <sub>2</sub> )			
SPECIAL FIRE FIGHTING PROCEDURES: Evacuate area of all unnecessary personnel. Use standard fire fighting procedures. Full protective equipment should be worn.			
UNUSUAL FIRE AND EXPLOSION HAZARDS: Carbon oxides formed when burned. Heat will cause pressurized containers to explode. Can be cooled with water fogging nozzles.			
<b>SECTION V - HEALTH HAZARD DATA</b>			
TOXICITY DATA			
Based on individual components of the formulation the following acute toxicity for the product was established:			
LD <sub>50</sub> , Oral, Rat:	>5000 mg/kg		
LD <sub>50</sub> , Dermal, Rabbit:	>2020 mg/kg		
LD <sub>50</sub> , Inhalation, Rat:	> 5.00 mg/L		
Eye Irritation, Rabbit:	Moderate to severe.		
Skin Irritation, Rabbit:	Moderately irritating.		
<b>EFFECTS OF OVEREXPOSURE</b>			
EYE CONTACT:	Moderate to severe. Avoid contact with eyes. Propellant can cause freeze like burns when misused.		
SKIN CONTACT:	Moderately irritating. Avoid contact with skin. Propellant can cause freeze like burns when misused.		
INHALATION:	Avoid breathing vapors.		
INGESTION:	Harmful if ingested. Avoid swallowing product.		
CHRONIC:	Long-term studies on the concentrated active ingredients have not been done; however, no adverse effects expected from normal use.		

## EMERGENCY AND FIRST AID PROCEDURES

### EYE

**CONTACT:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses if present after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

### SKIN

**CONTACT:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**INHALATION:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for treatment advice.

**INGESTION:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**RECOMMENDED EXPOSURE LIMITS:** None established.

**LISTED AS CARCINOGEN  
BY NTP, IARC, OR OSHA:** No.

**OTHER HEALTH EFFECTS:** No known adverse effects expected.

**HEALTH HAZARD CATEGORIES:** EPA Toxicity Category: III - CAUTION.

## SECTION VI - REACTIVITY DATA

**STABILITY:** Stable.

**INCOMPATIBILITY:** Strong oxidizing agents and oxygen. Heat or flame.

**HAZARDOUS  
DECOMPOSITION  
PRODUCTS:** Carbon oxides formed when burned. Hydrocarbon fumes and smoke.

**HAZARDOUS  
POLYMERIZATION:** Will not occur.

## SECTION VII - SPILL OR LEAK PROCEDURE

### STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Since the product is in individual steel pressurized containers they may be picked up and reused. If the containers are dented they may be returned. If the container is punctured the resulting release may be washed up with detergent and water.

### ENVIRONMENTAL HAZARDS/ WASTE DISPOSAL:

The containers can be offered for recycling in aerosol recycling centers. At present, there are only a few such centers in the country. Before offering for recycling, empty the can by using the product according to the label (Do Not Puncture). If the recycling is not available, wrap the container in several layers of newspapers and discard in the trash.

**SECTION VIII - SPECIAL PROTECTION INFORMATION**

RESPIRATORY PROTECTION: Not required under normal use conditions.

PROTECTIVE GLOVES: Not required under normal use conditions.

EYE PROTECTION: Not required under normal use conditions.

OTHER PROTECTIVE EQUIPMENT: Not required under normal use conditions.

VENTILATION: Not applicable.

**SECTION IX - SPECIAL PRECAUTIONS**

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE, ETC.**

Avoid skin and eye contact. Avoid breathing vapors. Store in cool place until used. Do not contaminate water, food or feed by storage.

**SECTION X - REGULATORY INFORMATION**

Suterra LLC is unaware of any local, state or federal regulations which define the active ingredient as hazardous.

While this information and recommendations set forth are believed to be accurate as of the date hereof, Suterra LLC makes no warranty with respect hereto and disclaims all liability from reliance thereon.

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Contact: Richard W. Fresh, Regulatory Affairs, Suterra LLC