

Chemical Name	CAS-No	Weight %
D-Limonene	5989-27-5	60-100
Odorant	Proprietary	1-5
Carbon Dioxide	124-38-9	1-5

4. FIRST AID MEASURES

Eye contact	Flush with plenty of water for at least 15 minutes. Seek medical attention.
Skin contact	Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use.
Ingestion	Do not induce vomiting. Immediate medical attention is required.
Inhalation	Remove from exposure. Restore breathing. Keep warm and quiet. Contact physician if breathing difficulty develops.

5. FIRE FIGHTING MEASURES

Flash point °C	46
Flash point °F	115
Method	Pensky-Martens C.C.

Autoignition temperature °C	Not Applicable
Autoignition temperature °F	Not Applicable

Flammability Limits (% in Air)

Upper	7.0
Lower	0.7

Suitable extinguishing media

Carbon dioxide (CO₂). Dry chemical. Foam.

Special protective equipment for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Special Fire-Fighting Procedures

Water should be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

Fire and Explosion Hazards

Water spray may be ineffective. If water is used, fog nozzles are preferable. During emergency conditions, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention. Keep product and empty container away from heat and sources of ignition. Avoid breathing of vapors. Avoid skin and eye contact.

Sensitivity to shock

No information available.

Sensitivity to static discharge

No information available.

6. ACCIDENTAL RELEASE MEASURES

Methods for cleaning up

Eliminate all sources of ignition. Ventilate area to maintain exposure below permissible exposure limits. Soak up with inert absorbent material.

7. HANDLING AND STORAGE

Handling

Keep away from open flame. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Do not puncture or incinerate. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst. Keep in a well-ventilated place. Turn off other sources of ignition prior to use and until all vapors have dissipated. Vapors may accumulate readily and may ignite explosively. Remove all sources of ignition. Do not smoke. Contents under pressure. Do not take internally. Avoid breathing spray mist. Keep out of reach of children.

Storage

Store in temperatures below 120 degrees F.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits

Chemical Name	OSHA PEL (TWA)	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
D-Limonene	-	-	-	-
Odorant	-	-	-	-
Carbon Dioxide	5000 ppm exposures < 10,000 ppm to be cited de minimus 9000 mg/m ³	-	5000 ppm	30000 ppm

Ventilation and Environmental Controls

Adequate ventilation should be provided to keep exposure levels below current acceptable exposure limits. Local: recommended. General: as necessary.

Hygiene measures

Wash hands before breaks and immediately after handling the product.

Other precautions

Avoid contact with the skin and the eyes

Personal protective equipment**Respiratory protection**

Follow OSHA respirator regulations (29 CFR 1910.134) and if necessary, wear a MSHA/NIOSH approved respirator. Wear a NIOSH approved organic vapor/particulate respirator.

Hand Protection

For prolonged or repeated skin contact, use a chemically resistant glove such as nitrile or neoprene. Wash hands with soap and water after removing gloves. Dry hands thoroughly before re-applying gloves. .

Eye protection

Wear safety glasses with side shields.

Skin and body protection

None necessary under normal conditions

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Aerosol	Color	Colorless
Odor	No information available	Odor Threshold	Not Applicable
pH	Not Applicable	Specific Gravity	0.85
Vapor pressure	Not Applicable	Vapor density	>Air
Evaporation Rate	>1 (ether = 1)	Density	7.06 lbs/gal
VOC Content	93.99 %	Water solubility	No data available
Partition Coefficient (n-octanol/water)	Not Applicable		
Boiling point/range °C	< -18 - 211	Boiling point/range °F	< 0 - 412
Melting point/range °C	Not Applicable	Melting point/range °F	Not Applicable
Flash point °C	46	Flash point °F	115

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

None known.

Incompatibility

None known .

Hazardous Decomposition Products

Carbon dioxide. Carbon monoxide.

Polymerization

Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Component Information

Chemical Name	LD50 (oral, rat)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat)
<i>D-Limonene</i> 5989-27-5	4400 mg/kg	2000 mg/kg	-
<i>Odorant</i> <i>Proprietary</i>	-	-	-
<i>Carbon Dioxide</i> 124-38-9	-	-	836 ppm

Synergistic Products

None known

Potential health effects

Sensitization

None known

Chronic toxicity

None known

Mutagenic effects

None known

Teratogenic effects

None known

Reproductive toxicity

None known

Target Organ Effects

None Known

Carcinogenic effects

See table below

Chemical Name	ACGIH OEL - Carcinogens	IARC	NTP - Known Carcinogens	NTP - Suspected Human Carcinogens	OSHA RTK Carcinogens
D-Limonene	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Odorant	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Carbon Dioxide	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed

Specific Hazards

Reports have associated repeated and prolonged occupational exposure to solvents with permanent brain damage.

12. ECOLOGICAL INFORMATION

No Information Available

13. DISPOSAL CONSIDERATIONS

Disposal Information

As supplied, this product is a RCRA Hazardous Waste . Waste must be tested for ignitability to determine EPA hazardous waste numbers. Do not puncture or incinerate. Depressurize before disposal.

Waste from residues / unused products

Dispose in accordance with federal, state, and local regulations.

14. TRANSPORT INFORMATION

DOT

UN1950 Aerosols, flammable (d-limonene), Class 2.1

Exception: (Flammable Liquids PG III not more than 5.0L) Consumer Commodity ORM-D

TDG

UN1950 AEROSOLS, flammable (d-limonene), Class 2.1

IMDG/IMO

UN1950 AEROSOLS (d-limonene), Class 2.1

IATA

UN1950 Aerosols, flammable (d-limonene), Class 2.1

MEX

UN1950 AEROSOLE (d-limonene),2.1

15. REGULATORY INFORMATION

Chemical Name	New Jersey - RTK	Pennsylvania - RTK	California Prop. 65
D-Limonene	Not Listed	Not Listed	Not Listed
Odorant	Not Listed	Not Listed	Not Listed
Carbon Dioxide	Not Listed	Listed	Not Listed

Chemical Name	EINECS	DSL	NDSL	TSCA
D-Limonene	X	X	-	X
Odorant	-	-	-	-
Carbon Dioxide	X	X	-	X

CPRC

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all of the information required by the Controlled Product Regulations

16. OTHER INFORMATION

NFPA		HMIS	
Health	-	Health	2
Flammability	-	Flammability	2
Reactivity	-	Physical Hazard	0

Prepared By

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The information accumulated herein is believed to be accurate, but is not warranted to be, whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.