



**Precautionary Statements - Response**

Specific treatment (see .? on this label)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

IF ON SKIN: Wash with plenty of soap and water

If skin irritation or rash occurs: Get medical advice/attention

Wash contaminated clothing before reuse

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep cool

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)****Other information**

- Causes mild skin irritation
- Toxic to aquatic life with long lasting effects
- Toxic to aquatic life

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No	Weight %	Trade Secret
MENTHOFURAN	494-90-6	1-5%	*
MENTHYL ACETATE	89-48-5	1-5%	*
PULEGONES	15932-80-6	1-5%	*
LIMONENE	5989-27-5	1-5%	*

**4. FIRST AID MEASURES****First aid measures for different exposure routes**

<b>General advice</b>	If symptoms persist, call a physician.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing.
<b>Skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. Remove and wash contaminated clothing before re-use. Wash off immediately with plenty of water. Wash off immediately with soap and plenty of water. Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
<b>Inhalation</b>	Move to fresh air. If symptoms persist, call a physician. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. Move to fresh air in case of accidental inhalation of vapors or decomposition products.
<b>Ingestion</b>	Do NOT induce vomiting. Drink plenty of water. Immediate medical attention is not required. Rinse mouth. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.
<b>Protection of First-aiders</b>	Use personal protective equipment.

**Most important symptoms/effects, acute and delayed**

**Main Symptoms** Hives.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Notes to physician** May cause sensitization of susceptible persons. Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Use: Dry chemical. Carbon dioxide CO<sub>2</sub>. Water spray. Alcohol-resistant foam.

**Unsuitable Extinguishing Media**

Decomposition by contact with water may generate vapors which can be ignited by heat or open flame.

**Specific hazards arising from the chemical**

Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact. Keep product and empty container away from heat and sources of ignition. Risk of ignition.

**Explosion Data**

**Sensitivity to Mechanical Impact** none.

**Sensitivity to Static Discharge** Yes.

**Protective Equipment and Precautions for Firefighters**

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

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures****Personal precautions**

Use personal protective equipment. Avoid contact with the skin and the eyes. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Pay attention to flashback. Take precautionary measures against static discharges.

**Environmental precautions****Environmental precautions**

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

**Methods and materials for containment and cleaning up****Methods for Containment**

Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**

Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. After cleaning, flush away traces with water. Prevent product from entering drains. Dam up. Take precautionary measures against static discharges.

**7. HANDLING AND STORAGE****Precautions for safe handling****Advice on safe handling**

Wear personal protective equipment. Ensure adequate ventilation. Use only in area provided with appropriate exhaust ventilation. Do not breathe vapors or spray mist. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from heat, sparks and open flame. No smoking. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).

**Conditions for safe storage, including any incompatibilities**

**Technical measures/Storage conditions** Keep out of the reach of children. Keep container tightly closed. Keep away from heat and sources of ignition. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. Keep away from heat.

**Incompatible products** None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### Exposure controls

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems.

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

**Eye/Face Protection** Tightly fitting safety goggles. Face-shield.

**Skin and body protection** Chemical resistant apron.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene measures** When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Provide regular cleaning of equipment, work area and clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical and chemical properties

<b>Physical state</b>	liquid
<b>Appearance</b>	clear
<b>Odor</b>	strong penetrating peppermint
<b>Color</b>	Colorless to pale yellow.

<u>Property</u>	<u>Values</u>	<u>Methods</u>
pH		No information available
Melting/freezing point		FCC Method
Boiling point/boiling range		FCC Method
Flash Point	71 °C / 160 °F	Closed cup
Evaporation rate		No information available
Flammability (solid, gas)		No information available
Flammability Limits in Air		No information available
upper flammability limit	No information available	
lower flammability limit	No information available	
Vapor pressure mm Hg 20°C		No information available
Vapor density		No information available
Specific Gravity @ 25C	0.8960 - 0.9080	FCC Method
Specific Gravity @ 20C	0.899 - 0.911	FCC Method
Refractive Index	1.4590 - 1.4650	FCC Method
Water solubility	Practically insoluble	
Solubility in other solvents		No information available
Partition coefficient: n-octanol/water		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Viscosity, kinematic		No information available
Viscosity, dynamic	No information available	
Explosive properties	No information available	
Oxidizing Properties	No information available	

### Other information

<b>Softening point</b>	No information available
<b>Molecular Weight</b>	No information available
<b>VOC Content(%)</b>	No information available
<b>Density VALUE</b>	No information available
<b>Bulk Density VALUE</b>	No information available

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

None under normal processing.

### Conditions to Avoid

Heat, flames and sparks.

### Incompatible Materials

None known based on information supplied.

### Hazardous Decomposition Products

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

<b>Product Information</b>	Product does not present an acute toxicity hazard based on known information
<b>Inhalation</b>	There is no data available for this product.
<b>Eye contact</b>	There is no data available for this product.
<b>Skin contact</b>	There is no data available for this product.
<b>Ingestion</b>	There is no data available for this product.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
PULEGONES 15932-80-6	470 mg/kg ( Rat )	3090 mg/kg ( Rabbit )	
LIMONENE 5989-27-5	4400 mg/kg ( Rat )	2000 mg/kg ( Rabbit )	

### Information on toxicological effects

**Symptoms** No information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** No information available.  
**Germ Cell Mutagenicity** No information available.  
**Carcinogenicity** This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

Chemical Name	ACGIH	IARC	NTP	OSHA
LIMONENE 5989-27-5		Group 3		

*IARC: (International Agency for Research on Cancer)  
 Group 3 - Not Classifiable as to Carcinogenicity in Humans*

**Reproductive toxicity** No information available.  
**Specific target organ systemic toxicity (single exposure)** No information available.  
**Specific target organ systemic toxicity (repeated exposure)** No information available.  
**Chronic toxicity** Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure.  
**Aspiration hazard** No information available.

### Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document

. mg/kg

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

11% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
LIMONENE 5989-27-5		0.619-0.796: 96 h Pimephales promelas mg/L LC50 flow-through 35: 96 h Oncorhynchus mykiss mg/L LC50		

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment****Waste Disposal Methods**

Dispose of in accordance with local regulations.

**Contaminated packaging**

Do not re-use empty containers.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
LIMONENE 5989-27-5	Toxic

**14. TRANSPORT INFORMATION****DOT**

Not regulated

**ICAO/IATA**

UN/ID No 3082  
 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (LIMONENE)  
 Hazard class 9  
 Packing Group III

**IMDG / IMO**

UN/ID No 3082  
 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (LIMONENE)  
 Hazard class 9  
 Packing Group III  
 Marine pollutant This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO

**15. REGULATORY INFORMATION****International Inventories**

TSCA -  
 DSL/NDSL -  
 EINECS/ELINCS -  
 ENCS -  
 IECSC -  
 KECL -  
 PICCS -  
 AICS -

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

### U.S. Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	no
Fire Hazard	Yes
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

#### Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

### U.S. State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals.

#### U.S. State Right-to-Know Regulations

#### U.S. EPA Label information

### 16. OTHER INFORMATION

<u>NFPA</u>	Health Hazard 2	Flammability 2	Instability 0	Physical and chemical hazards *
<u>HMIS</u>	Health Hazard 2	Flammability 2	Physical Hazard 0	Personal protection b

Revision Date 17-Oct-2014

#### Revision Note

No information available

#### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.

end