

## Safety Data Sheet



### Section 1: Identification

#### Product identifier

##### Product Name

- **Starbar UL-100 EC Insecticidal Spray**

##### Synonyms

- 100208917; 100208918; 100208919; 100527050; EPA Reg. No.: 89459-29; Prentox Emulsible Spray Concentrate #96

##### Product Description

- Pale yellow to amber liquid.

#### Relevant identified uses of the substance or mixture and uses advised against

##### Recommended use

- Insecticide.

##### Restrictions on use

- **KEEP OUT OF THE REACH OF CHILDREN.** Avoid contact with eyes, skin and clothing. Do not use or store near heat or open flame. Avoid release to the environment. Do not take internally. Avoid inhalation of vapors or fumes.

#### Details of the supplier of the safety data sheet

##### Manufacturer

- Central Garden & Pet Company  
1501 E. Woodfield Road, Suite 200W  
Schaumburg, IL 60173  
United States  
  
www.central.com

#### Emergency telephone number

##### Manufacturer

- 1-800-424-9300 - CHEMTREC

##### Manufacturer (Transportation)

- 1-703-527-3887 - Chemtrec - Outside US collect calls accepted

##### Manufacturer

- 1-800-248-7763

### Section 2: Hazard Identification

#### United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

#### Classification of the substance or mixture

##### OSHA HCS 2012

- Aspiration 1  
Flammable Liquids 4  
Skin Irritation 2  
Skin Sensitization 1  
Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects  
Serious Eye Damage 1

#### Label elements

## OSHA HCS 2012

**DANGER**

- Hazard statements**
- Causes skin irritation
  - May be fatal if swallowed and enters airways
  - May cause an allergic skin reaction
  - Combustible liquid
  - May cause drowsiness or dizziness
  - Causes serious eye damage

**Precautionary statements**

- Prevention**
- Wash thoroughly after handling.
  - Contaminated work clothing should not be allowed out of the workplace.
  - Wear protective gloves/protective clothing/eye protection/face protection.
  - Avoid breathing dust, fume, gas, mist, vapors and/or spray.
  - Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
  - Use only outdoors or in a well-ventilated area.
- Response**
- IF ON SKIN: Wash with plenty of soap and water.
  - If skin irritation occurs: Get medical advice/attention.
  - Take off contaminated clothing and wash before reuse.
  - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
  - Do NOT induce vomiting.
  - In case of fire: Use appropriate media CO<sub>2</sub>, foam, dry chemical or sand for extinction.
  - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison control center or doctor if you feel unwell.
  - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - Immediately call a POISON CENTER or doctor/physician.
- Storage/Disposal**
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
  - Store in a well-ventilated place. Keep cool.
  - Store locked up. Keep container tightly closed.

**Other hazards**

## OSHA HCS 2012

- This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. This product is toxic to aquatic organisms including fish and invertebrates. Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

**Section 3 - Composition/Information on Ingredients****Substances**

- Material does not meet the criteria of a substance.

**Mixtures**

Composition		
Chemical Name	Identifiers	%
Pyrethrins	CAS:8003-34-7	0.96%
Piperonyl butoxide	CAS:51-03-6	9.6%

Distillates (petroleum), hydrotreated light	CAS:64742-47-8	81.44%
Nonylphenol, ethoxylated	Proprietary	8%

## Section 4: First-Aid Measures

### Description of first aid measures

#### Inhalation

- IF INHALED: If breathing is difficult, remove person to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

#### Skin

- IF ON SKIN: Wash with plenty of soap and water. If irritation or rash occurs, get medical advice/attention. Take off contaminated clothing and wash before reuse.

#### Eye

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CONTROL center or doctor.

#### Ingestion

- IF SWALLOWED: Immediately call a poison control center or doctor. Aspiration hazard - if swallowed, do NOT induce vomiting.

### Most important symptoms and effects, both acute and delayed

- Aspiration hazard, causes serious eye damage, causes skin irritation, may cause an allergic skin reaction in individuals with a sensitivity to piperonyl butoxide, may cause dizziness and/or drowsiness if inhaled. Refer to Section 11 - Toxicological Information.

### Indication of any immediate medical attention and special treatment needed

#### Notes to Physician

- Contains petroleum distillate vomiting may cause aspiration pneumonia. Treat symptomatically and supportively.

## Section 5: Fire-Fighting Measures

### Extinguishing media

- Suitable Extinguishing Media**
- LARGE FIRE: Water spray, fog or regular foam.
  - SMALL FIRES: Dry chemical, CO<sub>2</sub>, sand or regular foam.

**Unsuitable Extinguishing Media**

- Avoid heavy hose streams.

#### Firefighting Procedures

- Do not allow fire fighting water to escape into waterways or sewers.
- LARGE FIRES: Dike fire control water for later disposal; do not scatter the material.
- LARGE FIRES: Move containers from fire area if you can do it without risk.
- Stay upwind.
- Ventilate closed spaces before entering.
- Do not breathe gas/fumes/vapor/spray.

### Special hazards arising from the substance or mixture

#### Unusual Fire and Explosion Hazards

- Combustible liquid.
- Containers may explode when heated.
- Liquid will float and may re-ignite on surface of water.

**Hazardous Combustion Products**

- Combustible liquid - may produce carbon dioxide and/or carbon monoxide.

**Advice for firefighters**

- Wear positive pressure self-contained breathing apparatus (SCBA).

**Section 6 - Accidental Release Measures****Personal precautions, protective equipment and emergency procedures****Personal Precautions**

- Do not walk through spilled material. Ventilate enclosed areas. Wear appropriate personal protective equipment, avoid direct contact.

**Emergency Procedures**

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Ventilate closed spaces before entering. Avoid release into the environment.

**Environmental precautions**

- LARGE SPILLS: Prevent entry into waterways, sewers, basements or confined areas.

**Methods and material for containment and cleaning up****Containment/Clean-up Measures**

- Absorb spills with an inert material, clay granules or other inert absorbent material and put in container for disposal.  
All equipment used when handling the product must be grounded.  
LARGE SPILLS: Dike far ahead of spill for later disposal.  
Stop leak if you can do it without risk.

**Section 7 - Handling and Storage****Precautions for safe handling****Handling**

- Keep away from fire - No Smoking. Avoid breathing fumes. Use only in well ventilated areas. Wear appropriate personal protective equipment, avoid direct contact.

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

- Store locked up. Store in a cool/low-temperature, well-ventilated dry place away from heat and ignition sources. Keep from freezing. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F

**Incompatible Materials or Ignition Sources**

- Heat, sparks, open flame.

**Other Information**

- See product label for additional information.

**Section 8 - Exposure Controls/Personal Protection****Control parameters****Exposure Limits/Guidelines**

- No data available.

Exposure Limits/Guidelines				
	Result	ACGIH	NIOSH	OSHA
Pyrethrins (8003-34-7)	TWAs	5 mg/m3 TWA	5 mg/m3 TWA	5 mg/m3 TWA

**Exposure Limits Supplemental****ACGIH**

- Pyrethrins (8003-34-7): **TLV Basis - Critical Effects:** (liver damage; lower respiratory tract irritation)

**Exposure controls****Engineering**

- Use adequate ventilation to remove vapors (fumes, dust, etc.)

**Measures/Controls****Personal Protective Equipment****Pictograms****Respiratory**

- In case of insufficient ventilation, wear suitable respiratory equipment. Not required with normal use. However, mixers, loaders, applicators and other handlers must wear respiratory protection with P or R filters.

**Eye/Face**

- Wear chemical splash safety goggles.

**Hands**

- Wear appropriate gloves.

**Skin/Body**

- If prolonged exposure is anticipated, it is recommended for handlers to wear appropriate clothing to prevent skin contact.

**Environmental Exposure Controls**

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

**Other Information**

- See product label for specific use PPE instructions.

**Section 9 - Physical and Chemical Properties****Information on Physical and Chemical Properties****Material Description**

Physical Form	Liquid	Appearance/Description	Yellow to amber liquid.
Color	Yellow to amber.	Odor	Pleasant woody.
Odor Threshold	No data available		

**General Properties**

Boiling Point	No data available	Melting Point/Freezing Point	No data available
Decomposition Temperature	No data available	pH	No data available
Specific Gravity/Relative Density	6.8 lb/gal (0.82 g/ml)	Density	No data available
Water Solubility	Insoluble	Viscosity	No data available
Critical Temperature	No data available		

**Volatility**

Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		

**Flammability**

Flash Point	152 °F(66.6667 °C) CC (Closed Cup)	UEL	7.0 (solvent)
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LEL	0.6 (solvent)	Autoignition	No data available
Flammability (solid, gas)	No data available		
<b>Environmental</b>			
Octanol/Water Partition coefficient	No data available		

## Section 10: Stability and Reactivity

### Reactivity

- Non-reactive under normal handling and storage conditions.

### Chemical stability

- Stable

### Possibility of hazardous reactions

- Hazardous polymerization will not occur.

### Conditions to avoid

- Direct sunlight. Do not freeze. Excessive heat >110°F. Heat, sparks, open flame, other ignition sources, and oxidizing conditions.

### Incompatible materials

- Store away from oxidizers.

### Hazardous decomposition products

- Carbon dioxide and possibly carbon monoxide.

## Section 11 - Toxicological Information

### Information on toxicological effects

Components		
Pyrethrins (0.96%)	8003-34-7	<b>Acute Toxicity:</b> Ingestion/Oral-Rat, adult female LD50 • 1030 mg/kg; Ingestion/Oral-Rat, adult male LD50 • 2370 mg/kg; Inhalation-Rat LC50 • 3.4 mg/L; Skin-Rat LD50 • 2000 mg/kg
Piperonyl butoxide (9.6%)	51-03-6	<b>Acute Toxicity:</b> Ingestion/Oral-Rat • 4300 mg/kg; Inhalation-Rat • >5 mg/L 4 Hour(s); Skin-Rat LD50 • >2000 mg/kg; <b>Irritation:</b> Eye-Rabbit • Essentially non-irritating; Skin-Rabbit • Essentially non-irritating

GHS Properties	Classification
<b>Acute toxicity</b>	OSHA HCS 2012 • Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation - Classification criteria not met; Acute Toxicity - Oral - Classification criteria not met
<b>Skin corrosion/Irritation</b>	OSHA HCS 2012 • Skin Irritation 2
<b>Serious eye damage/Irritation</b>	OSHA HCS 2012 • Serious Eye Damage 1
<b>Skin sensitization</b>	OSHA HCS 2012 • Skin Sensitizer 1
<b>Respiratory sensitization</b>	OSHA HCS 2012 • Classification criteria not met
<b>Aspiration Hazard</b>	OSHA HCS 2012 • Aspiration 1
<b>Carcinogenicity</b>	OSHA HCS 2012 • Classification criteria not met
<b>Germ Cell Mutagenicity</b>	OSHA HCS 2012 • Not classified - data lacking

<b>Toxicity for Reproduction</b>	OSHA HCS 2012 • Classification criteria not met
<b>STOT-SE</b>	OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects
<b>STOT-RE</b>	OSHA HCS 2012 • Classification criteria not met

**Potential Health Effects**

**Inhalation**

- Acute (Immediate)** • May cause drowsiness and dizziness.
- Chronic (Delayed)** • No data available

**Skin**

- Acute (Immediate)** • May cause an allergic reaction in individuals with a sensitivity to piperonyl butoxide. Causes skin irritation.
- Chronic (Delayed)** • No data available

**Eye**

- Acute (Immediate)** • Causes serious eye damage.
- Chronic (Delayed)** • No data available

**Ingestion**

- Acute (Immediate)** •  
Aspiration hazard - small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.
- Chronic (Delayed)** • No data available

**Mutagenic Effects**

- Piperonyl butoxide was not genotoxic in several tests, including the Ames mutagenicity assay, chromosome aberration in Chinese hamster ovary (CHO) cells, CHO/HGPRT assay with S9 activation and in the unscheduled DNA synthesis (UDS) assay in cultured human liver cells. Pyrethrins were not found to be genotoxic and did not damage DNA in any study conducted which included: Ames assay, chromosome aberration in Chinese hamster ovaries (CHO) cells and in the unscheduled DNA synthesis (UNS) assay in cultured human liver cells.

**Carcinogenic Effects**

- Piperonyl butoxide is not classified as carcinogen by NTP, IARC and OSHA. Pyrethrins are not listed as a carcinogen by OSHA, IARC, or NTP.

**Reproductive Effects**

- Pyrethrins did not produce any birth defects or adverse effects on reproductive parameters in tests with rats and rabbits.

**Section 12 - Ecological Information**

**Toxicity**

Components		
Pyrethrins (0.96%)	8003-34-7	<b>Aquatic Toxicity-Fish:</b> 96 Hour(s) LC50 <i>Rainbow trout</i> 0.0051 mg/L [Acute] 96 Hour(s) LC50 <i>Sheepshead minnow</i> 0.016 mg/L [Acute] 96 Hour(s) NOEC <i>Fathead minnow</i> 0.0019 mg/L [Chronic] NOEC <i>Sheepshead minnow</i> 0.0059 mg/L [estimated chronic] <b>Aquatic Toxicity-Crustacea:</b> NOEC <i>Daphnia magna</i> 0.00086 mg/L [Chronic] NOEC <i>Mysid shrimp</i> 0.0001 mg/L [Estimated chronic] 96 Hour(s) LC50 <i>Mysid Shrimp</i> 0.0014 mg/L [Acute] 48 Hour(s) LC50 Water Flea <i>Daphnia magna</i> 0.0116 mg/L [Acute]
Distillates (petroleum), hydrotreated light (81.44%)	64742-47-8	<b>Aquatic Toxicity-Fish:</b> 96 Hour(s) LC50 <i>Rainbow Trout</i> 2.9 mg/L [Acute] 96 Hour(s) LC50 <i>Lepomis macrochirus</i> 2.2 mg/L [Acute]

**Persistence and degradability**

- Pyrethrins have low persistence in the environment due to rapid breakdown in presence of UV light.

**Bioaccumulative potential**

- No data available.

**Mobility in Soil**

- Pyrethrins are relatively immobile in soil.

**Other adverse effects****Potential Environmental Effects**

- This product is toxic to aquatic organisms, including fish and invertebrates. This product is highly toxic to bees exposed to direct treatment. Care should be taken to avoid contamination of the environment.

**Section 13 - Disposal Considerations****Waste treatment methods****Product waste**

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Do not contaminate water by disposal.

**Packaging waste**

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. See product label for disposal instructions.

**Section 14 - Transport Information**

	UN number	UN proper shipping name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	None	Not regulated (for packages <104 lbs.)	None	None	Not Applicable
	NA1993	Packages >= 104 lbs. Combustible liquid n.o.s. (Petroleum Distillates)	Comb. Liq.	III	RQ = Pyrethrins = 1 lb.
IMO/IMDG	UN3082	Packaging 5 L or greater: Environmentally Hazardous Substance, Liquid (Pyrethrins, piperonyl butoxide)	9	III	Marine Pollutant
IATA/ICAO	UN3082	Packaging 5 L or greater: Environmentally Hazardous Substance, Liquid (Pyrethrins, piperonyl butoxide)	9	III	Acute Aquatic Toxicity

**Special precautions for user** • None specified.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** • No data available

**Other information**

**DOT** • Environmental Hazards: RQ (Pyrethrins = 1 lb).

**IMO/IMDG** • No data available

**IATA/ICAO** • No data available



## Section 15 - Regulatory Information

### Safety, health and environmental regulations/legislation specific for the substance or mixture

**SARA Hazard Classifications** • SARA Title III Section 313, Acute

### FIFRA – Pesticide Labeling

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

### CAUTION

**Precautionary Statements** • KEEP OUT OF THE REACH OF CHILDREN.

**Hazards to Humans and Domestic Animals**

Contains Petroleum Distillate. Harmful if absorbed through the skin. Avoid contact with skin, eyes or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

**First Aid**

If on skin or clothing • 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. If swallowed • Immediately call a Poison Control Center or doctor. • Do not induce vomiting unless told to do so by the Poison Control Center or doctor. • Do not give any liquid to the person. • Do not give anything by mouth to an unconscious person. NOTE TO PHYSICIAN: Contains petroleum distillate - vomiting may cause aspiration pneumonia.

**Environmental Hazards**

For Terrestrial Applications: This product is toxic to aquatic organisms, including fish and invertebrates. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. This product may contaminate water through runoff. This product has a potential for runoff for several weeks after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. Except as specified in the directions for use, do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean highwater mark. Do not contaminate water when disposing of equipment wash-water or rinsate. For Wide Area Mosquito Adulticide Applications: This pesticide is toxic to aquatic organisms, including fish and invertebrates. Runoff from treated areas or deposition of spray droplets into a body of water may be hazardous to fish and aquatic invertebrates.

When applying as a wide area mosquito adulticide, before making the first application in a season, it is advisable to consult with the state or tribal agency with primary responsibility for pesticide regulation to determine if other regulatory requirements exist. This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply when bees are visiting the treatment area, except when applications are made to prevent or control a threat to public and/or animal health determined by a state, tribal, or local health or vector control agency on the basis of documented evidence of disease causing agents in vector mosquitoes or the occurrence of mosquito-borne disease in animal or human populations, or if specifically approved by the state or tribe during a natural disaster recovery effort. When applying as a wide area mosquito adulticide, do not apply over bodies of water (lakes, rivers,

permanent streams, natural ponds, commercial fish ponds, swamps, marshes or estuaries), except when necessary to target areas where adult mosquitoes are present, and weather conditions will facilitate movement of applied material away from the water in order to minimize incidental deposition into the water body. {For containers equal to or greater than 5 gallons} Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters in less in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewerage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

Inventory		
Component	CAS	TSCA
Distillates (petroleum), hydrotreated light	64742-47-8	Yes
Nonylphenol, ethoxylated	Proprietary	Yes
Piperonyl butoxide	51-03-6	Yes
Pyrethrins	8003-34-7	No

**United States**

**Environment**

**U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities**

• Nonylphenol, ethoxylated	Proprietary	Not Listed
• Pyrethrins	8003-34-7	1 lb final RQ (listed under Pyrethrins); 0.454 kg final RQ (listed under Pyrethrins)
• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Piperonyl butoxide	51-03-6	Not Listed

**U.S. - CERCLA/SARA - Section 313 - Emission Reporting**

• Nonylphenol, ethoxylated	Proprietary	Not Listed
• Pyrethrins	8003-34-7	Not Listed
• Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• Piperonyl butoxide	51-03-6	1.0 % de minimis concentration

**Section 16 - Other Information**

**Revision Summary**

Revision Date	MSDS Number	Changes
25/August/2016		• Section 1 Changed - Updated Material Number

**Revision Date** • 25/August/2016

**Last Revision Date** • 22/September/2015

**Preparation Date** • 06/July/2015

**Disclaimer/Statement of Liability**

• The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability

for their own particular purpose of any information or products referred to herein. NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.