# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product Identifier:

**Trade name:** Entech Fog-5 Space Spray

SDS Date of Preparation: 4/8/15

# 1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against:

**Product Use:** An insecticide formulated for use indoors as a ULV, Space, Area, Contact Spray or Thermal fog for certain insects. Use only according to label directions. It is a violation of Federal law to

use this product in a manner inconsistent to label directions.

Uses Advised Against: None known

## 1.3 Details of the Supplier of the Safety Data Sheet:

Manufacturer: Entech Systems Corporation

607 Maria Street Kenner, LA 70062 (504) 469-6541

**Telephone:** (504) 469-6541 **Website:** www.entech.la

# 1.4 Emergency Telephone Number:

For medical emergencies or pesticide incidents: 800-222-1222 (Poison Control Center) For Transportation spills: 800-424-9300 (Chemtrec), 703-527-3887 (Chemtrec International)

# **SECTION 2: HAZARDS IDENTIFICATION**

#### 2.1 Classification of the Substance or Mixture:

# **GHS Classification:**

Physical	Health	Environment
Flammable Liquid Category 4	Aspiration Toxicity Category 1	Aquatic Acute Toxicity Category 1
(H227)	(H304)	(H400)
	Skin Irritant Category 2 (H315)	Aquatic Chronic Toxicity Category 1
	Skin Senstization Category 1	(H410)
	(H317)	
	Specific Target Organ Toxicity	
	Single Exposure Category 3	
	(H336)	

EU Classification: Harmful (Xn), Dangerous for the Environment (N) R38, R43, R65, R50/53

# 2.2 Label Elements:

Danger!



Contains: Distillates (petroleum), hydrotreated light, Pyrethrins

#### **Statements of Hazard**

H227 Combustible liquid.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H336 May cause drowsiness or dizziness. H410 Very toxic to aquatic life with long lasting effects.

## **Precautionary Statements**

P210 Keep away from flames and hot surfaces. No smoking.

P261 Avoid breathing mists, vapors, or spray.

P264 Wash hands thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves.

P302 + P352 IF ON SKIN: Wash with plenty of water.

P333 + P313 If skin irritation or rash occurs: Get medical attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor.

P331 Do NOT induce vomiting.

P304 + P340 IF INHALED: Remove person to fresh air and

keep comfortable for breathing.

P312 Call a POISON CENTER or doctor if you feel unwell.

P370 + P378 In case of fire: Use foam, carbon dioxide, or dry

chemical to extinguish. P391 Collect spillage.

P403 + P235 + P233 Store in a well-ventilated place. Keep

cool. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents and container in accordance with

local and national regulations.

#### 2.3 Other Hazards: None known.

# **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

## 3.2 Mixture:

Chemical Name	CAS#	EINECS#	EU Classification (67/548/EEC)	Classification	Amount
Distillates (petroleum), hydrotreated light	64742-47-8	265-149-8	Xn, N R38, R51/53, R65	Skin Irrit. Cat 2 (H315), Asp. Tox. Cat 1 (H304), STOT SE Cat 3 (H336), Aquatic Chronic Cat 2 (H411)	97%
Piperonyl Butoxide	51-03-6	200-076-7	N R50/53	Aquatic Acute Cat 1 (H400), Aquatic Chronic Cat 1 (H410)	2.5%
Pyrethrins	8003-34-7	232-319-8	Xn, N R20/21/22, R43, R50/53	Acute Tox. Cat 4 (H302, H312, H332), Skin Sens. Cat 1 (H317), Aquatic	0.5%

	Acute Cat 1 (H400),	
	Aquatic Chronic Cat 1	
	(H410)	

The exact concentration is being withheld as a trade secret.

Refer to Section 16 for the full text of the GHS and EU Classifications.

#### **SECTION 4: FIRST AID MEASURES**

## 4.1 Description of First Aid Measures:

**Eye:** Flush victim's eyes with large quantities of water, while holding the eyelids apart. Get medical attention if irritation develops or persists.

**Skin:** Remove contaminated clothing and shoes. Flush thoroughly with water for several minutes. Get medical attention if irritation or rash occurs. Launder clothing before re-use.

**Ingestion:** Aspiration hazard: do NOT induce vomiting. Keep the victim calm and warm. If conscious, rinse mouth with water. Never give anything by mouth to an unconscious or convulsing person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration into the lungs. Get immediate medical attention.

**Inhalation:** Remove victim to fresh air. Get medical attention if you feel unwell.

- **4.2 Most Important symptoms and effects, both acute and delayed:** May cause moderate skin irritation. May cause skin sensitization. Inhalation of mist or vapors may cause headache, dizziness, nausea and other symptoms of central nervous system depression. Aspiration hazard: material may enter the lungs if swallowed and cause lung injury.
- **4.3 Indication of any immediate medical attention and special treatment needed:** Immediate medical attention is required if swallowed.

#### **SECTION 5: FIRE-FIGHTING MEASURES**

- **5.1 Extinguishing Media:** Use foam, carbon dioxide, or dry chemical. Do not use water jet or flooding amounts of water. Burning product will float on the surface and spread fire.
- **5.2 Special Hazards Arising from the Substance or Mixture:** This product is a combustible liquid. Burning may produce oxides of carbon, smoke fumes, and unburned hydrocarbons.
- **5.3 Advice for Fire-Fighters:** Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire exposed containers and structures with water.

# **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**6.1** Personal Precautions, Protective Equipment and Emergency Procedures: Evacuate spill area and keep unprotected personnel away. Remove all ignition sources such as open flames, pilot lights, etc. Avoid contact with the eyes, skin and clothing. Wear appropriate protective clothing as described in Section 8. Avoid breathing mists or vapors. Ventilate area.

#### 6.2 Environmental Precautions:

Avoid releases to the environment. Report releases as required by local, state and federal authorities.

**6.3 Methods and Material for Containment and Cleaning Up:** Dike and collect liquid or absorb with an inert absorbent and place in appropriate containers for disposal.

## **6.4 Reference to Other Sections:**

Refer to Section 8 for Personal Protective Equipment and Section 13 for Disposal information.

#### **SECTION 7: HANDLING AND STORAGE**

**7.1 Precautions for Safe Handling:** Avoid contact with the eyes, skin and clothing. Avoid breathing mists or vapors. Wear protective clothing and equipment as described in Section 8. Use with adequate ventilation. Wash thoroughly with soap and water after handling. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash before reuse. Discord clothing and other absorbent material that have been drenched or heavily contaminated with this product's concentrate. Keep containers closed when not in use. Keep product away from heat, flames and all other sources of ignition.

Non-refillable container. Do not reuse or refill this container. Empty containers retain product residues which can be hazardous. Follow all SDS precautions when handling empty containers.

**7.2 Conditions for Safe Storage, Including any Incompatibilities:** Store this product in its original container in a cool, dry (preferable locked) place away from heat or open flame in a area that is inaccessible to children and animals. Keep away from oxidizers and other incompatible materials. Keep containers tightly closed.

7.3 Specific end use(s): Industrial use only

# **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

## 8.1 Control Parameters:

Chemical Name	Exposure Limits
Distillates (petroleum), hydrotreated light	5 mg/m3 TWA ACGIH TLV (inhalable) (as mineral oil)
	5 mg/m3 TWA OSHA PEL (as oil mist, mineral)
	20 ppm TWA, 40 ppm STEL DFG MAK (inhalable)
	5 mg/m3 TWA, 10 mg/m3 STEL UK WEL
Piperonyl Butoxide	None Established
Pyrethrins	5 mg/m3 TWA ACGIH TLV
	5 mg/m3 TWA OSHA PEL
	1 mg/m3 TWA, 1 mg/m3 STEL Germany AGS
	1 mg/m3 TWA EU OEL
	1 mg/m3 TWA UK WEL

## **8.2 Exposure Controls:**

**Appropriate Engineering Controls:** Use with adequate ventilation to maintain exposure levels below the occupational exposure limits. Refer product label for additional information.

#### **Personal Protective Equipment:**

**Respiratory Protection:** In operations where the occupational exposure limits are exceeded, an approved respirator with dust/mist cartridges or supplied air respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with applicable regulations and good industrial hygiene practice. Refer to the product label for additional information.

Skin Protection: Wear impervious gloves to prevent skin contact. In Europe follow EN 374.

**Eye/Face Protection:** Wear safety glasses or goggles where splashing is possible. In Europe follow EN 166.

**Other:** Wear long-sleeve shirts, long pants, socks and shoes when using this product. In Europe follow EN 13034. Suitable washing facilities should be available in the work area.

# **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

## 9.1 Information on Basic Physical and Chemical Properties:

Appearance: Pale yellow liquid	Vapor Pressure: No data available		
Odor: Solvent odor	Vapor Density: Heavier than air		
Odor Threshold: No data available	<b>Relative Density:</b> 0.797 g/mL @ 77°F (25°C) (6.57 lb/gal)		
<b>pH</b> : 4.84 @ 77°F (25°C)	Solubility(ies): Immiscible in water		
Melting Point/Freezing Point: No data available	Octanol/Water Partition Coefficient: No data available		
Initial Boiling Point/Range: No data available	Autoignition Temperature: No data available		
Flash Point: >188.6°F (>87°C) Pensky-Martens	<b>Decomposition Temperature:</b> No data available		
Closed Cup			
Evaporation Rate: No data available	Viscosity: 2.65 cST @ 20.1°C (68.18°F)		
Flammability (solid, gas): Not applicable	Explosive Properties: Not explosive		
Flammable Limits: LEL: 0.6% (Solvent)	Oxidizing Properties: Not an oxidizer		
UEL: 5.5% (Solvent)			

9.2 Other Information: None available.

# **SECTION 10: STABILITY AND REACTIVITY**

- 10.1 Reactivity: Not normally reactive.
- **10.2 Chemical Stability:** Stable under normal storage and handling conditions.
- **10.3 Possibility of Hazardous Reactions:** Material will not polymerize.
- **10.4 Conditions to Avoid:** Keep away from heat, flames and other sources of ignition.
- 10.5 Incompatible Materials: Avoid strong oxidizing agents, strong acids, and bases.
- **10.6 Hazardous Decomposition Products:** When heated to decomposition emits oxides of carbon, smoke fumes, and unburned hydrocarbons.

#### **SECTION 11: TOXICOLOGICAL INFORMATION**

# 11.1 Information on Toxicological Effects:

## **Potential Health Effects:**

**Eye:** May cause irritation with redness, pain and tearing.

**Skin:** May cause moderate skin irritation. May cause an allergic skin reaction (sensitization).

**Ingestion:** Aspiration hazard. May cause lung damage during swallowing or vomiting. Swallowing may cause central nervous system depression with headache, nausea, dizziness and unconsciousness, gastrointestinal irritation with nausea, vomiting and diarrhea and injury to the lungs and brain.

Inhalation: Inhalation of vapors or mists may cause central nervous system depression with symptoms

of headache, dizziness, nausea, drowsiness and unconsciousness may also occur.

Chronic Hazards: None known.

# **Acute Toxicity Values:**

**Product Toxicity Data:** 

ATE Oral: >5000 mg/kg (calculated)
ATE Dermal: >2000 mg/kg (calculated)

# Component Toxicity Data:

Distillates (petroleum), hydrotreated light: Oral rat LD50: >5000 mg/kg, Inhalation rat LC50: >5.28 mg/L/4hr (no mortality), Dermal rabbit LD50: >2000 mg/kg

Piperonyl Butoxide: Oral rat LD50: 5630 mg/kg, Inhalation rat LC50: >5.9 mg/L/4hr (no mortality), Dermal

rabbit LD50: >2000 mg/kg

Pyrethrins: Oral rat LD50: 1030 mg/kg, Inhalation rat LC50: 3.4 mg/L/4hr, Dermal rat LD50: 2000 mg/kg

Irritation: Distillates (petroleum), hydrotreated light: Irritating to rabbit skin. Not irritating to rabbit eyes.

Corrosivity: No data available for the mixture. Based on components, this product is not classified as corrosive.

**Sensitization:** This material is expected to cause skin sensitization based on the positive result when tested on guinea pigs. Product may cause an allergic reaction in individuals with a sensitivity to pyrethrins.

**Carcinogenicity:** None of the components is listed as a carcinogen or suspected carcinogen by IARC, NTP, OSHA, or the EU CLP.

**Germ Cell Mutagenicity:** Not expected to cause germ cell mutagenicity.

**Reproductive Toxicity:** Not expected to cause reproductive toxicity.

**Specific Target Organ Toxicity:** 

**Single Exposure:** None known. **Repeated Exposure:** None known.

# **SECTION 12: ECOLOGICAL INFORMATION**

#### 12.1 Toxicity:

Distillates (petroleum), hydrotreated light: 96hr LC50 Lepomis macrochirus: 2.2 mg/L

Piperonyl Butoxide: 96hr LC50 Rainbow Trout: 1.9 mg/L, 96hr LC50 Sheephead minnow: 3.94 mg/L, NOEC Fathead minnow: 0.04 mg/L, LOEC Fathead minnow: 0.11 mg/L, 48hr LC50 Mysid Shrimp: 0.49 mg/L, 48hr EC50

Daphnia magna: 0.51 mg/L, LOEC Daphnia magna: 0.047 mg/L, NOEC Daphnia magna: 0.03 mg/L

Pyrethrins: 96hr LC50 Rainbow trout: 0.0051 mg/L, 96hr LC50 Sheepshead minnow: 0.016 mg/L, NOEC Fathead minnow: 0.0019 mg/L, NOEC Sheepshead minnow: 0.0059 mg/L, 96hr LC50 Mysid shrimp: 0.0014 mg/L, 48hr LC50 Daphnia magna: 0.0116 mg/L, NOEC Mysid Shrimp: 0.0001 mg/L, NOEC Daphnia magna: 0.00086 mg/L (Acute M Factor-100, Chronic M Factor-100)

This product is classified as very toxic to the aquatic environment with long-term adverse effects. Releases to the environment should be avoided.

**12.2 Persistence and Degradability:** No data available for mixture. Pyrethrins: Pyrethrin class of insecticides is degraded readily by ambient microogranisms; therefore, pyrethrin is expected to biodegrade readily. Distillates (petroleum), hydrotreated light: Readily biodegradable- 58.6% in 28 days,

**12.3 Bioaccumulative Potential:** No data available for mixture.

**12.4 Mobility in Soil:** No data available for mixture.

12.5 Results of PBT and vPvB Assessment: No data available

12.6 Other Adverse Effects: None known.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

#### 13.1 Waste Treatment Methods:

Container Disposal: Non-refillable container. Do not reuse or refill this container. Place in trash or offer for recycyling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Product Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollution Discharge Elimination System (NPDES) permit, and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product into sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the Environmental Protection Agency (EPA). Do not contaminate water by cleaning of equipment or disposal of wastes. Dispose in accordance with local, state and federal environmental regulations.

# **SECTION 14: TRANSPORTATION INFORMATION**

	14.1 UN	14.2 UN Proper Shipping	14.3 Hazard	14.4 Packing	14.5
	Number	Name	Class(s)	Group	Environmental Hazards
US DOT	NA1993	Combustible Liquid, n.o.s. (Distillates (petroleum), hydrotreated light) *	Combustible Liquid	III	RQ 200 lbs (Pyrethrins)
Canadian TDG	None	Not Regulated	None	None	Not applicable
EU ADR/RID	UN3082	Environmentally Hazardous Substance, Liquid, n.o.s. (Pyrethrins)	9	III	Marine Pollutant

IMDG	UN3082	Environmentally Hazardous Substance, Liquid, n.o.s. (Pyrethrins)	9	III	Marine Pollutant
IATA/ICAO	UN3082	Environmentally Hazardous Substance, Liquid, n.o.s.	9	III	Marine Pollutant
		(Pyrethrins)			

<sup>\*</sup>Excepted from HazMat in Non-Bulk Packaging

14.6 Special Precautions for User: Not applicable

14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

#### **SECTION 15: REGULATORY INFORMATION**

15.1 Safety, Health and Environment Regulations/Legislation Specific for the Substance or Mixture:

#### **U.S. FEDERAL REGULATIONS:**

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.

## FIFRA Labeling:

# KEEP OUT OF REACH OF CHILDREN CAUTION PRECAUTIONARY STATEMENTS Hazards to Humans & Domestic Animals

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

**Environmental Hazards:** This product is toxic to aquatic organisms, including fish and invertebrates. Do not contaminated water when disposing of equipment washwater or rinsate. See Directions for Use for additional precautions and requirements.

For containers 5 gallons or greater: Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollution 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 sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

**Physical and Chemical Hazards:** Do not use or store near heat or open flame.

**CERCLA 103 Reportable Quantity:** This product has an RQ of 200 lbs (based on the RQ of Pyrethrins of 1 lbs present at 0.5%). Some states have more stringent reporting requirements. Report all spills in accordance with local, state, and federal regulations.

SARA Hazard Category (311/312): Acute Health, Fire Hazard

**SARA Section 313 Toxic Chemicals:** This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372):

Piperonyl Butoxide

51-03-6

2.5%

**EPA Toxic Substances Control Act (TSCA) Status:** This product contains a component that is not listed on the EPA TSCA Inventory. This product is an EPA registered pesticide, EPA Registration No 40391-13.

#### **STATE REGULATIONS:**

**California Proposition 65:** This product does not contain chemicals known in the State of California to cause cancer and/or reproductive harm.

## **INTERNATIONAL REGULATIONS:**

#### **CANADIAN REGULATIONS**

**Canadian Environmental Protection Act:** All of the components in this product are listed on the Domestic Substances list (DSL).

This SDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the SDS contains all of the information required by the CPR.

# **EUROPEAN REGULATIONS**

**REACH:** Entech Systems Corporation products comply with REACH regulation as applicable. For more information, contact Entech Systems Corporation.

SVHC: This product contains the following Substances of Very High Concern (SVHCs): None

**15.2 Chemical Safety Assessment:** None required.

#### **SECTION 16: OTHER INFORMATION**

NFPA Rating: Health = 2 Flammability = 2 Instability = 0

HMIS Rating: Health = 2 Flammability = 2 Physical Hazard = 0

**SDS Revision History:** 4/8/15: New Reach SDS

## GHS Classification for Reference (See Sections 2 and 3):

Acute Tox. Cat 4 Acute Toxicity Category 4

Aquatic Acute Cat 1 Aquatic Acute Toxicity Category 1

Aquatic Chronic Cat 1 Aquatic Chronic Toxicity Category 1

Aquatic Chronic Cat 2 Aquatic Chronic Toxicity Category 2

Asp. Tox. Cat 1 Aspiration Toxicity Category 1

Flam. Liq. Cat 4 Flammable Liquid Category 4

Skin Irrit. Cat 2 Skin Irritant Category 2

Skin Sens. Cat 1 Skin Sensitization Category 1

STOT SE Cat 3 Specific Target Organ Toxicity Single Exposure Category 3

H227 Combustible liquid.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H332 Harmful if inhaled.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

# EU Classes and Risk Phrases for Reference (See Sections 2 and 3):

Xn Harmful

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R38 Irritating to the skin.

R43 May cause sensitization by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R65 Harmful: May cause lung damage if swallowed.

#### **NOTICE**

This above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. Entech Systems Corporation shall not be held liable for any damage resulting from handling or from contact with the above product. This information relates only to the product designated herein and does not relate to its use in combination with any other material or process. Before buying or using this product, read the Warranty Disclaimer and Limitation of Remedies statements on the label. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.