

# Entech Systems Corporation

## Material Safety Data Sheet

Entech Fog-10

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Entech Fog-10  
**EPA REGISTRATION NUMBER:** 40391-10  
**CHEMICAL DESCRIPTION:** Mixture; a.i.'s: pyrethrin, piperonyl butoxide & N-octyl bicycloheptene dicarboximide  
**SYNONYM(S):** None  
**PRODUCT DESCRIPTION:** Insecticide

#### Manufacturer

Entech Systems  
Corporation  
607 Maria St.  
Kenner, LA 70062 (USA)  
[www.entech.la](http://www.entech.la)  
504-469-6541  
Call for Product Information

#### EMERGENCY TELEPHONE NUMBERS

**(INCLUDING HEALTH CONCERNS, MEDICAL EMERGENCIES, OR PESTICIDE INCIDENTS), Call the Poison Control Center at 800-222-1222.**

**For Transportation spills, Call CHEMTREC 800-424-9300**

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

##### CAUTION

- Harmful if swallowed or absorbed through skin.
- Prolonged or frequent repeated skin contact may cause allergic reactions in some individuals.
- This material is highly toxic to aquatic organisms including fish and invertebrates.
- Keep out of reach of children.

#### POTENTIAL HEALTH EFFECTS

**Acute Toxicity (Primary Routes of Exposure):** Ingestion and skin contact

**Signs and Symptoms of Systemic Effects:** May cause gastrointestinal effects such as nausea, vomiting and diarrhea. Ingestion of large quantities can result in nervous system effects such as dizziness, loss of coordination, tremors and loss of consciousness. Symptoms usually regress with no long lasting effects.

**Acute Skin Contact:** May cause mild skin irritation. Harmful if absorbed.

**Acute Ingestion:** Harmful if swallowed.

**Potentially Aggravated Medical Conditions:** None known

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For complete discussion of the toxicology data from which this evaluation was made, refer to Section 11. For Ecotox/Environmental Information, refer to Section 12. For Regulatory Information, refer to Section 15.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight/ Percent	Purpose
Pyrethrin	8003-34-7	1.00	Active Ingredient
Piperonyl butoxide (5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-1,3-benzodioxole)	51-03-6	2.0	Active Ingredient
N-octyl bicycloheptene dicarboximide	113-48-4	3.33	Active Ingredient
Aliphatic Petroleum Distillates	64742-47-8	93.67	Solvent

Other ingredients, which are maintained as trade secrets, are any substances other than an active ingredient contained in this product. Some of these may be hazardous, but their identity is withheld because they are considered trade secrets. The hazards associated with the other ingredients are addressed in this document. Specific information on other ingredients for the management of exposures or safety assessments can be obtained by a treating physician or nurse by calling the National Pesticide Telecommunications Network at 1-800-858-7378.

### 4. FIRST AID MEASURES

#### 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.

#### INGESTION:

Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center.

#### INHALATION:

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

#### NOTES TO PHYSICIAN:

This product contains a Pyrethroid pesticide. If a small amount is ingested (or if treatment is delayed) oral administration of large amounts of activated charcoal and a cathartic is probably sufficient therapy. If large amounts are ingested and vomiting has not occurred emesis should be induced with supervision. Keep patients head below hips to prevent aspiration. If symptoms such as loss of gag reflex, convulsions or unconsciousness occur before emesis, gastric lavage using a cuffed endotracheal tube should be considered.

Do not administer milk, cream or other substance containing vegetable or animal fats, which enhance the absorption of lipophilic substances.

If localized paresthesia develops, the site should be thoroughly washed with soap and water. Cold cream can be applied to help diminish the effect.

Contains petroleum distillates - vomiting may cause aspiration pneumonia.

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## 5. FIRE FIGHTING MEASURES

<b>FLASH POINT:</b>	215° F (102° C)
<b>FLASH POINT METHOD:</b>	TCC
<b>EXTINGUISHING MEDIA:</b>	Carbon dioxide, dry chemical, foam, or water.
<b>OSHA FLAMMABILITY CLASS:</b>	IIIA
<b>NFPA RATING:</b>	
<b>Health:</b>	1
<b>Flammability:</b>	1
<b>Reactivity:</b>	0
<b>Special:</b>	None

(Least-0, Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using professional judgment. Values were not available in the guidelines or published evaluations prepared by the National Fire Protection Association, NFPA.

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

## 6. ACCIDENTAL RELEASE MEASURES

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**Call Entech Systems Corporation ( USA) at 504-469-6541**

UN/NA NUMBER 1993

EMERGENCY RESPONSE GUIDEBOOK NO: 171

### If it is safe to do so:

- Evacuate non-essential personnel from the area to prevent human exposure.
- Remove all sources of ignition.
- Ventilate area, especially low areas where vapors may accumulate.
- Stop the source of the spill. Contain the spill to prevent further contamination of the soil, surface water, or ground water.
- May produce slippery conditions.

**GENERAL AND DISPOSAL:** Use proper protective equipment to minimize personal exposure (see Section 8). Take all necessary action to prevent and to remedy the adverse effect of the spill. For additional spill response information refer to the **North American Emergency Response Guidebook**, if applicable. Ensure that the disposal is in compliance with all Federal, State, and local regulations. Refer to Section 14 for applicable Reportable Quantity (RQ) and other regulatory requirements.

### FOR SPILLS OR LEAKS:

**CONTAINMENT:** If container is punctured or leaking, soak up liquid with an absorbent material such as sand, sawdust earth, fuller's earth, etc. Place in an approved chemical waste container for disposal. Where possible, container should be oriented to prevent further leakage. Containers should be placed in a spillage drum for further movement or transport.

## 7. HANDLING AND STORAGE

### END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.

**HANDLING PRECAUTIONS:** Avoid contact with skin, eyes or clothing. Prolonged or frequent repeated skin contact may cause allergic reactions in some individuals. Avoid breathing vapors or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Discard clothing and other absorbent material that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

**STORAGE:** Do not contaminate water, food or feed by storage or disposal. Do not store near heat or open flame.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.**

**EYES & FACE:** Do not get this material in your eyes. Eye contact can be avoided by wearing protective eyewear.

**RESPIRATORY PROTECTION:** Use this material only in well ventilated areas. Unless ventilation is adequate to keep airborne concentrations below recommended exposure standards, approved respiratory protection should be worn.

**SKIN & HAND PROTECTION:** Avoid contact with skin or clothing. Skin contact should be minimized by wearing protective clothing including gloves.

**ENGINEERING CONTROLS:** Normal mechanical exhaust ventilation is recommended.

### EXPOSURE LIMITS

Chemical Name	ACGIH Exposure Limits	OSHA Exposure Limits	Manufacturer's Exposure Limits
Pyrethrin	5 mg/m <sup>3</sup> TWA	5 mg/m <sup>3</sup> TWA	None
Piperonyl butoxide (5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-1,3-benzodioxole)	None	None	None
N-octyl bicycloheptene dicarboximide	None	None	None
Aliphatic Petroleum Distillates	None	None	1200 mg/m <sup>3</sup> TWA

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>PHYSICAL FORM:</b>	Liquid
<b>COLOR:</b>	Pale yellowish, clear
<b>ODOR:</b>	Mild aromatic
<b>FLASH POINT:</b>	215° F (102° C)
<b>FLASH POINT METHOD:</b>	TCC
<b>DENSITY:</b>	0.806 g/mL
<b>pH:</b>	4.92 @ 22.7° C
<b>VISCOSITY:</b>	3.041 mm <sup>2</sup> /s (cSt) @ 21° C
<b>SOLUBILITY:</b>	Miscible with Aliphatic Petroleum Distillates

## 10. STABILITY AND REACTIVITY

<b>CHEMICAL STABILITY:</b>	Stable
<b>INCOMPATIBILITY:</b>	Strong oxidizing agents
<b>OXIDATION/REDUCTION PROPERTIES:</b>	No apparent reaction with water, monoammonium phosphate, granular zinc, or 1% KMnO <sub>4</sub>
<b>EXPLODABILITY:</b>	Not expected to be explosive
<b>HAZARDOUS POLYMERIZATION :</b>	Will not occur

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## 11. TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY:

The following information based on the concentrate material, 73049-222.

Oral Toxicity LD <sub>50</sub> (rats)	> 5050 mg/kg	EPA Tox Category	IV
Dermal Toxicity LD <sub>50</sub> (rabbits)	> 5050 mg/kg	EPA Tox Category	IV
Inhalation Toxicity LC <sub>50</sub> (rats)	> 2.07 mg/L	EPA Tox Category	IV
Eye Irritation (rabbits)	Non-irritating	EPA Tox Category	IV
Skin Irritation	Slightly irritating	EPA Tox Category	IV
Skin Sensitization (guinea pigs)	Sensitizer	EPA Tox Category	Not available

### CARCINOGEN CLASSIFICATION

Chemical Name	IARC - Group 1 (carcinogenic to humans)	IARC - Group 2A (Probably carcinogenic)	IARC - Group 2B (Possibly carcinogenic)	NTP Carcinogen List
Pyrethrin	No	No	No	Not listed
Piperonyl butoxide (5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-1,3-benzodioxole)	No	No	No	Not listed
N-octyl bicycloheptene dicarboximide	No	No	No	Not listed
Aliphatic Petroleum Distillates	No	No	No	Not listed

**SUBCHRONIC:** Workers exposed to pyrethroids have experienced temporary skin paresthesia with abnormal sensations including burning, tingling or itching. This product contains a pyrethroid. Pyrethroids produce salivation, diarrhea, weakness tremors and convulsions in laboratory animals exposed to high doses.

For a summary of the potential for adverse health effects from exposure to this product, refer to Section 2. For information regarding regulations pertaining to this product, refer to Section 15.

## 12. ECOLOGICAL INFORMATION

**AQUATIC ORGANISM TOXICITY:** This material is highly toxic to aquatic organisms including fish and invertebrates. Drift and run-off may be hazardous to aquatic organisms in water adjacent to treated area. This product may contaminate water through run-off. This product has a potential for run-off for several weeks after application. Poorly drained soil with shallow water tables are more prone to produce run-off that contains this product.

### OTHER NON-TARGET ORGANISM TOXICITY:

This product is toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product while bees are actively visiting the treatment area.

### OTHER ENVIRONMENTAL INFORMATION:

Do not apply directly to water, to areas where surface water is present or to intertidal areas below mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters. See Directions for Use on product label for additional precautions and restrictions.

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.)

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### 13. DISPOSAL CONSIDERATIONS

**END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS.**

**PRODUCT DISPOSAL:**

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:**

Triple rinse container (or equivalent) then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or by other approved by state and local procedures.

**DISPOSAL METHODS:**

Check government regulations and local authorities for approved disposal of this material. Dispose in accordance with applicable laws and regulations.

### 14. TRANSPORT INFORMATION

<b>UN/NA NUMBER:</b>	3082
<b>DOT (ground) SHIPPING NAME:</b>	Environmentally hazardous substances, liquid, n.o.s.(pyrethrins)
<b>TECHNICAL NAME (hazardous material):</b>	Pyrethrins
<b>HAZARD CLASS:</b>	9
<b>PACKING GROUP:</b>	III
<b>DOT REPORTABLE QUANTITY (RQ):</b>	Pyrethrin RQ = 1 lb active ingredient. (This product is not regulated by DOT in quantities of 1 gallon or less)
<b>REMARKS:</b>	None
<b>EXEMPTION REQUIREMENT:</b>	None
<b>EMERGENCY RESPONSE GUIDEBOOK NO.:</b>	171
<b>MARINE POLLUTANT:</b>	Not applicable

### 15. REGULATORY INFORMATION

**PESTICIDE REGULATIONS:** All pesticides are governed under FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act). Therefore, the regulations presented below are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/formulation facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

**U.S. FEDERAL REGULATIONS:**

Ingredients in this product are reviewed against an inclusive list of federal regulations. Therefore, the user should consult appropriate authorities. The federal regulations reviewed include: Clean Water Act, SARA, CERCLA, RCRA, DOT, TSCA and OSHA. If no components or information is listed in the space below this paragraph, then none of the regulations reviewed are applicable.

**Pyrethrin**

CERCLA Reportable Quantity (RQ):	0.454 kg 1 lb
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**Piperonyl butoxide (5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-1,3-benzodioxole)**

TSCA Inventory List -	Listed
SARA 313 Chemicals	1.0% de minimis concentration

**Aliphatic Petroleum Distillates**

TSCA Inventory List -	Listed
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**SARA (311, 312):**

Immediate Health: Yes  
 Chronic Health: No  
 Fire: Yes  
 Sudden Pressure: No  
 Reactivity: No

**STATE REGULATIONS:**

Each state may promulgate standards more stringent than the federal government. This section cannot encompass an inclusive list of all state regulations. Therefore, the user should consult state or local authorities. The state regulations reviewed include: California Proposition 65, California Directors List of Hazardous Substances, Massachusetts Right to Know, Michigan Critical Materials List, New Jersey Right to Know, Pennsylvania Right to Know, Rhode Island Right to Know and the Minnesota Hazardous Substance list. For Washington State Right to Know, see Section 8 for Exposure Limit information. For Louisiana Right to Know refer to SARA information listed under U.S. Regulations above. If no components or information is listed in the space below this paragraph, then none of the regulations reviewed are applicable.

**Pyrethrin**

California - Directors List of Hazardous Substances	Present
MA Right To Know	Listed
NJ Right To Know	Listed
PA Right To Know	Listed
RI Right To Know	Listed
MN Hazardous Substance	Listed

**Piperonyl butoxide (5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-1,3-benzodioxole)**

NJ Right To Know Listed

For information regarding potential adverse health effects from exposure to this product, refer to Sections 2 and 11.

<b>16. OTHER INFORMATION</b>
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<b>REASON FOR ISSUE:</b>	New MSDS
<b>EPA REGISTRATION NUMBER:</b>	40391-10
<b>MSDS NO.:</b>	ENT 10-2
<b>REVISION NUMBER:</b>	1
<b>REVISION DATE:</b>	10/15/2010
<b>SUPERCEDES DATE:</b>	08/31/2004
<b>RESPONSIBLE PERSON(S):</b>	Entech Systems Corporation. Corporation, (504) 469-6541

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-APPROVED PRODUCT LABELING (attached to and accompanying the product container). This MSDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products is regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling. All necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.

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The information in this MSDS is based on data available to us as of the revision date given herein, and believed to be correct. Contact Entech Systems to confirm if you have the most current MSDS.

Judgments as to the suitability of information herein for the individual's own use or purposes are necessarily the individual's own responsibility. Although reasonable care has been taken in the preparation of such information, Entech extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the individual's purposes or the consequences of its use.

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