

MATERIAL SAFETY DATA SHEET

Bengal Insecticide Concentrate

1. COMPANY & PRODUCT INFORMATION

Product: Bengal Insecticide Concentrate

EPA Reg. No. 1021-1641-68543

Emergency Telephone No.: (225) 753-1313 (24 hours)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

CAUTION. OSHA-COMBUSTIBLE LIQUID. Do not use or store near heat, sparks, open flame, or any other ignition sources. Harmful if swallowed, inhaled, or absorbed through the skin. Contains petroleum distillates - Vomiting may cause aspiration pneumonia. Avoid contact with skin, eyes, and clothing. Avoid breathing vapors or spray mists of this product. Do not apply this product around electrical equipment due to the possibility of shock hazard. DO NOT allow this product to exceed 160°F (71.1°C) as Hydrogen Cyanide Gas may be produced.

POTENTIAL HEALTH EFFECTS

EYES: May cause temporary irritation, tearing, and blurred vision.

SKIN: Can cause skin irritation. Can cause a burning or prickling sensation on more sensitive areas (face, eyes, mouth).

SKIN ABSORPTION: Harmful if absorbed through the skin.

INGESTION: Harmful if swallowed. Small amounts of this material may get into the lungs during ingestion or vomiting and may cause mild to severe lung injury.

INHALATION: Harmful if inhaled.

CHRONIC EFFECTS: None known.

3. HAZARDS IDENTIFICATION

Esfenvalerate [(S)-Cyano (3-phenoxyphenyl) methyl 4-chloro-alpha-(1-methylethyl) benzeneacetate]

CAS# 66230-04-4

Exposure Limits: 2 mg/m³ (TWA, skin)(supplier recommended),

Wt.%.: 3.48%

Paraffinic, Naphthenic solvent

CAS# 64742-47-8

Exposure Limits: 100ppm (525mg/m³) TWA (supplier recommended)

Wt.%.: 50.0% to 75.0%

TWA = Time Weighted Average (8 hr).

COMMENTS: Ingredients not identified are proprietary or non-hazardous. Values are not product specifications.

4. FIRST AID MEASURES

EYES: 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: 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.

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.

INGESTION: Immediately call a poison control center or doctor for treatment advice. DO NOT give any liquid to the person. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

NOTE TO PHYSICIANS: This product contains Pyrethroids and Petroleum Distillates; Vomiting may pose an aspiration pneumonia hazard. For skin effects, a highly efficient therapeutic agent for Pyrethroid exposure is topical application of Tocopherol Acetate (Vitamin E). Diazepam has been recommended to reduce the CNS effects of Esfenvalerate.

5. FIRE FIGHTING MEASURES

This product is classified as an OSHA-COMBUSTIBLE LIQUID.

FLASH POINT: 145°F

Treat as an oil fire. Keep personal removed and upwind of fire. Use a full-faced self-contained breathing apparatus along with full protective gear. Keep nearby containers and equipment cool with a water spray. Contain the run-off, if possible, for proper disposal.

FLAMMABLE LIMITS:

LOWER FLAMMABLE LIMIT: not established.

UPPER FLAMMABLE LIMIT: not established.

AUTOIGNITION TEMPERATURE: not established.

SENSITIVE STATIC DISCHARGE: Yes, use proper bonding and/ or grounding procedures.

HAZARDOUS COMBUSTION PRODUCTS: Under fire conditions this product will support combustion and may decompose to give off toxic gasses such as HYDROGEN CYANIDE, carbon monoxide, carbon dioxide, and nitrogen oxides.

EXTINGUISHING MEDIA: Foam, carbon dioxide, or dry chemical.

6. SPILL/LEAK PROCEDURES

SMALL SPILL: Shut off ignition sources. Stop release, if possible without risk. Dike or contain release, if possible, and if immediate response can prevent further damage or danger. Isolate and control access to the release area. Take actions to reduce vapors. Absorb with appropriate absorbent. Clean spill area of residues and absorbent.

LARGE SPILL: Shut off ignition sources. Stop release, if possible without risk. Dike or contain release, if possible, and if immediate response can prevent further damage or danger. Isolate and control access to the release area. Take actions to reduce vapors. Collect product into drums, etc. via drains, pumps, etc. Absorb with appropriate absorbent. Clean spill area of residues and absorbent.

WASTE DISPOSAL METHOD: Contaminated absorbent and wash water should be disposed of according to local, state, and federal regulations.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: DO NOT USE THIS PRODUCT IN OR ON ELECTRICAL EQUIPMENT DUE TO POSSIBILITY OF SHOCK HAZARD. Do not use or store near heat, sparks, open flame, or any other ignition sources.

HANDLING: Take prudent precautions to avoid contact with skin, eyes, and clothing. Avoid breathing vapors or spray mists of this product. Mechanical ventilation should be used when handling this product in enclosed spaces. Do not contaminate water, food or feedstuffs by storage, handling or disposal. Read and observe all precautions and instructions on the label.

STORAGE: Store containers upright and closed. Store in areas that are cool, dry, and well-ventilated. Keep away from heat, sparks, open flame, and any other ignition sources. DO NOT allow this product to exceed 160°F (71.1°C) as Hydrogen Cyanide Gas may be produced. Keep away from strong acids, bases and oxidizers. Emptied containers may retain product residues. KEEP OUT OF REACH OF CHILDREN.

WORK HYGIENIC PRACTICES: DO NOT SMOKE, EAT, DRINK OR APPLY COSMETICS IN WORK AREA! Wash Promptly if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet.

ELECTROSTATIC ACCUMULATION: This product contains petroleum distillates, for which there is the potential for electrostatic accumulation. Proper grounding procedures should be used when transferring this material.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

EXPOSURE LIMITS: Not established by OSHA or ACGIH (see Section 2 for individual components).

ENGINEERING CONTROLS: Ventilate treatment area thoroughly before re-entry.

RESPIRATORY PROTECTION: Not required. Use in well ventilated areas.

SKIN PROTECTION: Take prudent precautions to avoid contact with skin and clothing.

EYE PROTECTION: Take prudent precautions to avoid contact with eyes.

9. PHYSICAL PROPERTIES

APPEARANCE: Pale, yellow-colored liquid.
ODOR: Odor of petroleum distillates.
PHYSICAL STATE: Liquid.
VAPOR PRESSURE: Not established
VOC: < 48%
VAPOR DENSITY: Heavier than air.
BOILING POINT: Not established
MELTING POINT: Not applicable.
SOLUBILITY: Miscible in water.
SPECIFIC GRAVITY: 0.853 (water = 1) @ 20°C (68°F)
COLOR, (GARDNER): 2
pH: 4.8 @ 3% in Water.
VISCOSITY: 10 CPS @ 23°C (73.4°F) Brookfield
REFRACTIVE INDEX: 1.4522 @ 25°C (77°F)

10. STABILITY & REACTIVITY

CHEMICAL STABILITY: Stable.
INCOMPATIBILITY: Strong acidic or alkaline materials.
HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen Cyanide Gas may be formed by thermal decomposition at 160°F (71.1°C), or by contact with alkaline substances such as soda ash & lye.
HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

EYE: Primary eye irritation (rabbit): Irritation clearing in 72 hours.
SKIN: Primary skin irritation index (rabbit): Moderate irritation at 72 hours. Irritation Index = 2.13
Dermal Sensitization (guinea pig): Negative; Not a dermal sensitizer.
Acute Dermal LD50 (rabbit): > 2.0 g/kg
INGESTION: Acute Oral LD50 (rat) = 1.47 g/kg
INHALATION: Acute Inhalation LC50 (rat) The Acute Inhalation LC50 of this material places it in EPA Toxic Category III. Rats exposed for 4 hours to test atmosphere.
CARCINOGENICITY: None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as being carcinogens.

12. ENVIRONMENTAL INFORMATION

This product is toxic to fish, birds, and other wildlife. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate ornamental fish ponds. Do not contaminate water when disposing of equipment wash waters or rinsate. 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 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 into sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

13. DISPOSAL

PESTICIDE DISPOSAL: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility. In case of spill or leak, soak up with sand, earth, or synthetic absorbents. Do not use alkaline absorbents or clean area of spill with alkaline detergents.
DISPOSAL: Do not reuse empty container. Wrap container in several layers of newspaper and discard in trash.
RCRA / CERCLA HAZARDOUS WASTE: None
RCRA/ EPA WASTE INFORMATION: None of the ingredients in this product appear on the RCRA lists (40 CFR 261.24, 40 CFR 251.33) or CERCLA Hazardous Substance List (40 CFR Part 302 Table 302.4).

14. TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: Insecticides, Insect or Animal Repellent, Liquid, N.O.S.
HAZARD CLASS: Non-Hazardous
IDENTIFICATION NUMBER (UN or NA): N/A
Not regulated as Hazardous by the Department of Transportation for Non-Bulk quantities (< 119 Gallons/ 450 Liters).

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:
SARA TITLE III: (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT) 311/ 312 HAZARD CATEGORIES:
FIRE: YES PRESSURE GENERATING: NO
REACTIVITY: NO ACUTE: YES

SECTION 313 REPORTABLE INGREDIENTS: This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372:

CAS#:	CHEMICAL NAME:	% BY WEIGHT:
066230-04-4	Esfenvalerate	3.48%
	[(S)-Cyano (3-phenoxyphenyl) methyl 4-chloro-alpha-(1 - methylethyl) benzeneacetate]	

302/ 304 EMERGENCY PLANNING EMERGENCY PLAN: There are no SARA Title III Section 302 extremely hazardous substances present in this formulation (40 CFR 355).

There are no components that are subject to emergency requirements under CERCLA Section 103(a)(40 CFR 302.4) in this formulation.
TSCA (TOXIC SUBSTANCE CONTROL ACT) STATUS: All chemical substances found in this product comply with the Toxic Substances Control Act's inventory reporting requirements.

STATE REGULATIONS: VOLATILE ORGANIC COMPOUNDS (VOC):
This product contains less than 48% VOC's.

CALIFORNIA PROPOSITION 65: This product DOES NOT contain any known ingredients for which the State of California has found to cause cancer, birth defects, or other reproductive harm, which requires a warning under the statute.

HMIS RATING
Health: 2 Fire: 2 Physical Hazard: 1
Personal Protection: none

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.

The 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, and 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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