



GORICH
TECHNOLOGY
LIMITED

必妥

Precor Plus Fogger



**MATERIAL
SAFETY DATA
SHEET v.2010**

1. Product: Precor Plus Fogger

2. Registration No: (1P147 AE). Agriculture, Fisheries and Conservation Department. Hong Kong.

3. Manufacturer

Wellmark International. U.S.A.

4. Emergency Contact

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5. Chemical Product Information

Product Name : Precor Plus Fogger
Chemical Name/Synonym : (S)-Methoprene; isopropyl (2E,4E,7S)-11-methoxy-3,7,11-trimethyl-2,4-dodecadienoate, and Permethrin: [(3-phenoxyphenyl) methyl (+/-) cis/trans-3-(2,2-dichloroethyl)-2,2-dimethylcyclopropanecarboxylate] (cis/trans ratio: min. 35% (+/-) cis and max. 65% (+/-) trans.
Chemical Family : Terpenoid / Pyrethroid
Formula : C 21 H20 C12 O3 / C19 H34 O3
EPA Registration No. : 2724-454
RF Number : 9626

6. Composition / Information on ingredients

Component (chemical, common name)	CAS No.	Weight	Tolerance
(S)-Methoprene: Isopropyl (2E,4E,7S)-11-Methoxy-3,7,11-trimethyl-2,4-dodecadienoate	65733-16-6	0.09%	Not established
Permethrin: (3-phenoxyphenyl) methyl (+/-) cis/trans-3- 2,2-dichloroethyl)-2, 2-dimethylcyclopropanecarboxylate	52645-53-1	0.58%	Not established
Inert Ingredients (nonhazardous) and / or trade secret)		99.33%	
Acetone	67-64-1		750 ppm (ACGIH TWA 1000 Ppm (OSHA TWA))

7. Hazard Information

PRECAUTIONARY STATEMENT

CAUTION: Keep out of reach of children. Harmful if inhaled, swallowed or absorbed through the skin. Avoid breathing vapors or spray mist. May cause eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after using. In case of contact, immediately flush eyes or skin with plenty of water. Obtain medical attention if irritation persists. Avoid contamination of food, foodstuffs and food preparation areas. Leave room or house at once after activating fogger.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Primary Route of Entry: Dermal Eye: No Oral: No Inhalation: Yes
ACUTE TOXICITY:

Oral : LD50 (rats) : > 34,000mg/kg (HDT) (Based on (S)-Methoprene)
Dermal : LD50 (rabbits) : >2,000mg/kg (HDT) (Based on (S)-Methoprene)
Inhalation : LC50 (rat) >5.19mg/L air (Based on (S)-Methoprene)

OTHER TOXICOLOGICAL INFORMATION

Skin Irritation : Non-irritant
Eye Irritation : Mild irritant
Sensitizer : Sensitizer

8. Fire-Fighting Measures

NFPA Rating : Health: 2 Fire: 4 Reactivity: 0
Flammability Class : Level 1 aerosol
Flash Point : 17 (F) (-8.3(C) (propellant-free portion of concentrate)
Explosive Limits (% of Volume) : LEL=3.4, UEL = 18.0 (based on Dimethyl ether)
Extinguishing Media : Water spray, foam, dry chemical, CO2
Special Protective Equipment: Firefighters should wear full protective clothing including self contained breathing apparatus.
Fire Fighting Procedures : Use water to keep fire exposed containers cool. Do not allow run-off to enter waterways or sewers. Contents under pressure.
Combustion Products : Oxides of carbon.
Unusual Fire/Explosion
Hazards : Extremely flammable. Contents under pressure. Keep away from fire, sparks, and heated surfaces. Do not puncture or incinerate container. Exposure to temperatures above 130F may cause bursting.

9. First Aid Measures

Eye : 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.
Skin : Remove contaminated clothing and wash affected areas with soap and water. Get medical attention if irritation persists.
Ingestion : Call a physician or Poison Control Centre immediately. Do not induce vomiting.
Inhalation : Remove victim to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. Call a physician if effects occur.
Note to Physician : May present an aspiration hazard.

10. Accidental Release Measures

Steps to be taken : Absorb spills with an inert material. Place in container for disposal. Do not allow spill to enter waterways or sewers.
Absorbents : Clay granules, sawdust, dirt, or equivalent.
Incompatibles : Strong oxidizers.



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11. Handling and Storage

Handling : Wash hands before eating or handling food. Avoid contact with skin, eyes, or clothing. Newspaper should be spread on the floor for several feet around area or release.
Storage : Store in a cool, dry, area away from heat of open flame.

12. Exposure Control / Personal Measures

Exposure Limits : Acetone: 750 ppm (ACGIH TWA) 1000ppm (OSHA TWA)
Ventilation : General ventilation should be sufficient. Users should leave building when fogger is activated.
Personal Protective Equipment : If prolonged exposure is expected, wear a MSHA/ NIOSH approved organic vapor / pesticide respirator, impervious gloves, goggles, and other appropriate clothing to avoid skin contact.

13. Physical and Chemical Properties

Appearance and Odor : Clear, light straw colored or almost colorless liquid. Characteristic sweetish, ethereal odor
Boiling Point : N/A
Melting Point : N/A
Vapor Pressure (mm Hg) : N/A
Vapor Density (Air = 1) : N/A
Specific Gravity : 0.08 (with propellant)
Bulk Density : 7.87 lbs./gal. (Propellant-free concentrate)
Solubility : Appreciable
Evaporation Rate : N/A
pH : 8.2

14. Stability and Reactivity

Stability : Stable
Reactivity : Non-reactive
Incompatibility w/ Other Materials : Strong oxidizers
Decomposition Products : None except oxides of carbon from incomplete combustion.
Hazardous Polymerization : Will not occur

15. Toxicological Information

CHRONIC TOXICITY [Specific to Active Ingredient(s)]
(S)-Methoprene is not considered as an oncogenic compound. [Based on (RS)-Methoprene Technical]
Permethrin showed no evidence of oncogenicity. A NOEL of 100 mg/kg was based on decreased body weight gain in the rat oncogenicity study. s

DEVELOPMENTAL/REPRODUCTIVE TOXICITY [Specific to Active Ingredient(s)]
Methoprene is not a teratogenic compound. [Based on (RS)-Methoprene Technical.]
Permethrin showed no evidence of developmental or reproductive effects. The NOEL was determined to be 180 mg/kg in the rat study. e

MUTAGENICITY [Specific to Active Ingredient(s)]
(S)-Methoprene is not a mutagenic compound. [Based on (RS)-Methoprene Technical]

16. Ecological Information

ENVIRONMENTAL FATE [Active Ingredients Only](Based on (S)-Methoprene)
Hydrolysis : T1/2 > 4 weeks
Photolysis : T1/2 < 10 hours
Soil half life : ~ 10 days
Water solubility : < 2 ppm
ECOTOXICITY [Active Ingredients Only] (Based on (S)-Methoprene)
Acute Toxicity : LC50 (trout): 760ppb, (Bluegill): >370ppb aquatic invertebrates: LC50 (Daphnia): 360 ppb

17. Disposal Considerations

Disposal: Do not puncture or incinerate. If Empty: Place in trash or offer for recycling if available. If Partly Filled: Call your local solid waste agency or 1-800-Cleanup for disposal instructions.

18. Transport Information

DOT49CFR Description : Consumer Commodity ORM-D
Freight Classification : Insecticides, Animal NOI o/t Poison NMFC 1-102120 class 60

19. Regulatory Information

CERCLA (Superfund) : Acetone: Reportable Quantity = 5000 lbs.
RCRA : Regulated due to ignitability.
SARA 311/312 HAZARD CATEGORIES
Immediate Health : Yes (irritant, sensitization)
Delayed Health : No
Fire : Yes
Sudden Pressure : Yes
Reactivity : No

The information presented herein, while not guaranteed, was prepared by technically knowledgeable personnel and to the best of our knowledge is true and accurate. It is not intended to be all inclusive and the manner and conditions of use and handling may involve other or additional considerations.