Date Issued: Supersedes:

MATERIAL SAFETY DATA SHEET PRECOR 2000 PLUS PREMISE SPRAY

Manufacturer:	Wellmark International
Address:	1501 East Woodfield Road, Suite 200-West Schaumburg, IL 60173
Emergency Phone:	1-800-950-4783
Transportation Emergency Phone:	CHEMTREC: 1-800-424-9300

1. CHEMICAL PRODUCT INFORMATION

Product Name:	Precor 2000 Plus Premise Spray
Chemical Name/Synonym:	(S)-Methoprene; isopropyl (2E,4E,7S)-11-methoxy-3,7,11-trimethyl-2,4- dodecadienoate, Permethrin; [(3-phenoxyphenyl)methyl(+/-)cis-trans-3- (2,2- dichloroetheyl)-2,2-dimethyl cyclopropanecarboxylate], Phenothrin: [3- phenoxyphenyl)methyl 2,2-dimethyl-3-(2-methyl-1-propenyl cyclopropanecarboxylate], Piperonyl Butoxide; 5-[2-(2-butoxyethoxy)ethoxymethyl]-6-propyl-1,3-benzodioxole, N-octyl bicycloheptane dicarboximide; N-(2-ethylhexyl)-5-norbonene-2,3- dicarboximide
Chemical Family:	Terpenoid/Pyrethroid
Formula:	$C_{21} \ H_{20} \ C_{12} \ O_3 \ / \ C_{19} \ H_{34} \ O_3 \ / \ C_{23} \ H_{26} \ O_3 \ / \ C_{19} \ H_{30} \ O_5 \ / \ C_{17} \ H_{25} \ N \ O_2$
EPA Registration No.:	2724-490
RF Number:	9910

2. COMPOSITION / INFORMATION ON INGREDIENTS

	<u>CAS</u> Number	<u>Weight</u>	Tolerance
(S)-Methoprene: [Isopropyl (2E,4E,7S)-11-methoxy-3,7,11- trimethyl- 2,4-dodecadienoate]	65733-16-6	0.085%	
Permethrin: [(3-phenoxyphenyl)methyl(+/-)cis-trans-3- (2,2- dichloroetheyl)-2,2-dimethyl cyclopropanecarboxylate]	52645-53-1	0.350%	
Phenothrin: [3-phenoxyphenyl)methyl 2,2-dimethyl-3-(2-methyl-1- propenyl cyclopropanecarboxylate]	26002-80-2	0.300%	
Piperonyl butoxide	51-03-6	1.400%	Not established
N-Octyl bicycloheptene dicarboximide	113-48-4	2.000%	Not established
Inert ingredients (non-hazardous and/or trade secret):		95.865%	
Propane	74-98-6		1000 ppm (OSHA TWA), simple asphyxiant (ACGIH)

3. HAZARD INFORMATION

PRECAUTIONARY STATEMENT

<u>CAUTION</u>: Keep out of the reach of children. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Symptoms of intoxication to permethrin are hypersensitivity, tremors, diarrhea. Intoxication to solvents may cause dizziness, headache, nausea, narcosis, eye irritation, G.I. tract irritation, and cardiac arrhythmia in certain cases.

PRIMARY ROUTE OF ENTRY	<u>Dermal/Eye:</u>	Yes.	Oral: No.	Inhalation: Yes.
ACUTE TOXICITY Oral	: LD50 (ra	t): >5,000 m	ng/kg body weight.	
Dermal	: LD50 (ra	bbit) : >5,000	mg/kg body weight.	
Inhalation	4-hour L	C50 (rat) : >2	.12 mg/L in air.	
OTHER TOXICOLOGICAL INFORMATION				
Skin Irritation:	Moderately	/ irritating to the	he skin.	
Eye Irritation:	Not an eye	e irritant.		
Sensitizer:	Weak sens	sitizer.		
4. FIRST AID MEASURES				
Eye:		ontact lenses,		th water for 15-20 minutes. st 5 minutes, and then continue
Skin:		ninutes. Call		nediately with soap and water r or doctor immediately for
Ingestion:	induce von	niting unless t ny liquid to the	told to do so by a poisc	tely for treatment advice. Do not on control center or doctor. Do nything by mouth to an
Inhalation:			air. If not breathing, ca , preferably mouth-to-m	Il 911 or an ambulence, then nouth if possible.
Note to Physician: Information:	In case of the produc	emergency, c	all 1-800-950-4783 or label with you when ca	cause aspiration pneumonia. a poison control center. Have alling a poison control center, or
5. FIRE FIGHTING MEASURES				
NFPA Rating:	Health:	2	Fire: 4	Reactivity: 0
Flammability Class:	Level 1 ae	rosol.		

Flammability Class:	Level 1 aerosol.
Flash Point:	Negative - no flash at less than 90° (C) (propellant-free concentrate).
Explosive Limits (% of Volume):	LEL: 1.8, UEL: 9.5; (propellant-free concentrate).
Extinguishing Media:	Water, CO2, dry chemical, or foam.
Special Protective Equipment:	Firefighters should wear full protective clothing including self-contained breathing apparatus.
Fire Fighting Procedures:	Contents under pressure. Exposure to temperatures above 130 F may cause bursting. Use water to keep fire exposed containers cool. Do not allow run-off water to enter waterways or sewers.
Combustion Products:	Oxides of carbon.
Unusual Fire/Explosion Hazards:	Contents under pressure. Do not puncture containers. Exposure to temperatures above 130° F may cause bursting.

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6. ACCIDENTAL RELEASE MEASUR	ES
Steps to be taken:	Absorb spills with an inert material and put in container for disposal.
Absorbents:	Clay granules, sawdust, dirt or equivalent.
Incompatibles:	Strong oxidizers.
. HANDLING AND STORAGE	
Handling:	Do not puncture or incinerate container. Do not use in food areas of food handling establishments, restaurants or other areas where food is commercially prepared or processed. Do not use in serving areas while food is exposed or facility is in operation.
Storage:	Store in a cool, dry area. Do not transport or store below 32° F.
B. EXPOSURE CONTROL / PERSON/	AL MEASURES
Exposure Limits:	Propane: 1000 ppm (OSHA TWA), simple asphyxiant (ACGIH).
Ventilation:	Use in a well ventilated area.
Personal Protective Equipment:	If prolonged exposure is anticipated, it is recommended for handlers to wear a MSHA/NIOSH approved organic vapor/pesticide respirator, impervious gloves goggles, and other appropriate clothing to avoid skin contact.
9. PHYSICAL AND CHEMICAL PROP	ERTIES
Appearance and Odor:	Turbid to opaque, almost colorless emulsion.
Boiling Point:	N/A.
Melting Point:	N/A.
Vapor Pressure (mm Hg):	N/A.
Vapor Density (Air = 1):	N/A.
Specific Gravity:	0.96 at 20° F (4° C) (propellant-free concentrate); 0.82 at 20° F (4° C) (enduse aerosol).
Bulk Density:	N/A.
Solubility:	N/A.
Evaporation Rate:	N/A.
pH:	7.89 (propellant-free concentrate).

10. STABILITY AND REACTIVITY

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

11. TOXICOLOGICAL INFORMATION

CHRONIC TOXICITY [Specific to Active Ingredient(s)]

Methoprene is not considered an oncogenic compound. The NOEL for non-carcinogen effects in an 18-month mouse study was 250ppm (based on (RS)-Methoprene).

Permethrin showed no evidence of oncogenicity. A NOEL of 100 mg/kg was based on decreased body weight gain in the oncogenicity study.

DEVELOPMENTAL/REPRODUCTIVE TOXICITY [Based on (RS) Methoprene Technical]

Methoprene is not a teratogen. The NOEL for maternal and embryotoxicity in rabbits was 200 mg/kg/day. The NOEL for reproductive effects in rats was 500 ppm.

Permethrin is not a teratogen. Rats were fed dose levels of 20 and 100 mg/kg diet in a 3-generation study. There was no effect on mortality, mating, pregnancy or fertility. Pup survival and growth were unaffected. Permethrin does not adversely affect reproduction in the rat.

MUTAGENICITY [Specific to Active Ingredient(s)]

Methoprene is not a mutagen. [Based on (RS)-Methoprene].

Permethrin was determined to be non-mutagenic in the following studies: Ames Test (in vitro), Chromosomal Aberration, and Host-Mediated.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE [Active Ingredients Only]

Hydrolysis: N/A. Photolysis: N/A.

Soil half life: N/A.

Water solubility: N/A.

ECOTOXICITY [Active Ingredients Only] Acute Toxicity:

This product is not intended for aquatic environments. Pyrethroids are potentially toxic to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

Wastes resulting from use of this product should be disposed of in accordance with all federal, state and local requirements. For additional regulatory information, see section 15 of this document.

14. TRANSPORT INFORMATION

DOT49CFR Description: Consumer Commodity, ORM-D.

Freight Classification: Insecticides, O/T Poison N.O.S., NMFC I - 102120.

15. REGULATORY INFORMATION

CERCLA (Superfund): Not regulated by CERCLA.

> RCRA: Regulated due to ignitability.

SARA 311/312 HAZARD CATEGORIES

Immediate Health: Yes (irritant).

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.

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