

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Trade name : Precor 2000 Plus Premise Spray
Synonyms : 3006018; 3006301; 3006302; EPA Reg. No.: 2724-490; RF9910 Aerosol

1.2. Recommended use and restrictions on use

Recommended use : Insect growth regulator. Insecticide.
Restrictions on use : Keep out of reach of children. Avoid all contact with skin, eyes, or clothing. Keep away from heat, sparks and flame. Use only outdoors or in a well-ventilated area. Do NOT take internally. Do not inhale.

1.3. Supplier

Wellmark International
1501 E. Woodfield Road, Suite 200W
Schaumburg, IL 60173 - United States
www.zoecon.com

1.4. Emergency telephone number

Emergency number : 1-800-248-7763
1-800-424-9300 - CHEMTREC
1-703-527-3887 - CHEMTREC - Outside North America - Collect Calls Accepted

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable aerosol Category 2	Flammable aerosol
Gases under pressure Compressed gas	Contains gas under pressure; may explode if heated
Skin corrosion/irritation Category 2	Causes skin irritation
Skin sensitization, Category 1	May cause an allergic skin reaction
Specific target organ toxicity (single exposure) Category 3	May cause drowsiness or dizziness
Aspiration hazard Category 1	May be fatal if swallowed and enters airways

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :






GHS02
GHS04
GHS07
GHS08

Signal word (GHS US) : Danger

Hazard statements (GHS US) :

- Flammable aerosol
- Contains gas under pressure; may explode if heated
- May be fatal if swallowed and enters airways
- Causes skin irritation
- May cause an allergic skin reaction
- May cause drowsiness or dizziness

Precautionary statements (GHS US) :

- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Do not spray on an open flame or other ignition source.
- Pressurized container: Do not pierce or burn, even after use.
- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Wash hands, forearms and face thoroughly after handling.
- Use only outdoors or in a well-ventilated area.
- Contaminated work clothing must not be allowed out of the workplace.
- Wear protective gloves/protective clothing/eye protection/face protection.
- If swallowed: Immediately call poison center or doctor.
- IF ON SKIN: Wash with plenty of water.
- If inhaled: Remove person to fresh air and keep comfortable for breathing.

Precor 2000 Plus Premise Spray

Safety Data Sheet

Call poison center or doctor if you feel unwell.
Do NOT induce vomiting.
If skin irritation or rash occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
(s)-Methoprene Technical	(CAS-No.) 65733-16-6	0.085
Permethrin	(CAS-No.) 52645-53-1	0.35
Piperonyl butoxide	(CAS-No.) 51-03-6	1.75
Phenothrin	(CAS-No.) 26002-80-2	0.3
N-Octyl Bicycloheptene Dicarboximide	(CAS-No.) 113-48-4	1.75
Distillates (petroleum), hydrotreated light	(CAS-No.) 64742-47-8	14
Ethoxylated nonylphenol, branched	(CAS-No.) 68412-54-4	1.8
2-Pyrrolidinone, 1-octyl-	(CAS-No.) 2687-94-7	0.4
Propane	(CAS-No.) 74-98-6	7.08
Butane	(CAS-No.) 106-97-8	6.92
Non-hazardous and/or does not meet criteria for classification	(CAS-No.) N/A	Balance

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

First-aid measures after skin contact : IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice and attention.

First-aid measures after ingestion : IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Call a physician immediately. Rinse mouth. Do NOT induce vomiting unless directed to do so by medical personnel.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : Causes drowsiness and dizziness.

Symptoms/effects after skin contact : Causes skin irritation. May cause an allergic reaction in individuals with a sensitivity to n-octyl bicycloheptene dicarboximide and/or piperonyl butoxide.

Symptoms/effects after ingestion : Aspiration Hazard - may be fatal if swallowed and enters airways.

4.3. Immediate medical attention and special treatment, if necessary

Contains petroleum distillate vomiting may cause aspiration pneumonia. Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Avoid heavy hose streams.

5.2. Specific hazards arising from the chemical

Fire hazard : Flammable aerosol. Pressurized container: may burst if heated.

Precor 2000 Plus Premise Spray

Safety Data Sheet

Explosion hazard	: Pressurized container. At temperatures above 130°F, container may rupture.
Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Do not use direct stream of water. A direct stream of water may spread fire. Ventilate closed spaces before entering. Do not breathe gas/fumes/vapor/spray. Move containers away from the fire area if this can be done without risk. Stay upwind. Do not allow fire fighting water to escape into waterways or sewers.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures	: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes and clothing. Wear appropriate personal protective equipment, avoid direct contact.
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6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: Exposure controls/personal protection.
Emergency procedures	: Contents under pressure. At temperatures above 130°F, container may rupture. As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Evacuate unnecessary personnel. Turn off electric power to area. Stay upwind. Stop leak if safe to do so. Ventilate area. Wear appropriate personal protective equipment, avoid direct contact.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Keep away from fire, sparks, and heated surfaces. Absorb spills with an inert material, clay granules or other inert absorbent material and put in container for disposal. Use appropriate PPE.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Wear personal protective equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Use only outdoors or in a well-ventilated area. Avoid breathing fumes.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store locked up. Store in a well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep cool. Keep from freezing. NFPA Aerosol Classification: Level 1.
Incompatible materials	: Heat, sparks, open flame. Strong acids. Strong bases. Strong oxidizers.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Distillates (petroleum), hydrotreated light (64742-47-8)		
ACGIH	ACGIH TWA (mg/m³)	Absorbed through skin. 200 mg/m³, (as total hydrocarbon vapor) 8 hours.
Propane (74-98-6)		
ACGIH	Remark (ACGIH)	Simple Asphyxiant
OSHA	OSHA PEL (TWA) (mg/m³)	1800 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	1000 ppm

Precor 2000 Plus Premise Spray

Safety Data Sheet

Propane (74-98-6)		
IDLH	US IDLH (ppm)	2100 ppm (10% LEL)
NIOSH	NIOSH REL (TWA) (mg/m³)	1800 mg/m³
NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm
Butane (106-97-8)		
ACGIH	ACGIH STEL (ppm)	1000 ppm
NIOSH	NIOSH REL (TWA) (mg/m³)	1900 mg/m³
NIOSH	NIOSH REL (TWA) (ppm)	800 ppm

8.2. Appropriate engineering controls

- Appropriate engineering controls : Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.
- Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Wear chemical resistant gloves made of barrier laminate, nitrile rubber, neoprene rubber or viton

Eye protection:

Safety glasses

Skin and body protection:

Wear long-sleeved shirt, long pants, socks and shoes

Respiratory protection:

In case of insufficient ventilation, use NIOSH approved respiratory protection.



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : White to clear aerosol spray
- Color : White to clear
- Odor : No data available
- Odor threshold : No data available
- pH : No data available
- Melting point : Not applicable
- Freezing point : No data available
- Boiling point : No data available
- Flash point : No data available
- Relative evaporation rate (butyl acetate=1) : No data available
- Flammability (solid, gas) : Flammable aerosol
- Vapor pressure : No data available
- Relative vapor density at 20 °C : No data available
- Relative density : No data available
- Solubility : No data available
- Partition coefficient n-octanol/water (Log Pow) : No data available
- Auto-ignition temperature : No data available
- Decomposition temperature : No data available

Precor 2000 Plus Premise Spray

Safety Data Sheet

Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: Pressurized container: may burst if heated
Oxidizing properties	: Not applicable
Flame extension	: 1 in
Heat of combustion	: 6.98 KJ/g

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Aerosols exposed to high temperatures may rupture, rocket and cause secondary hazards. Hazardous polymerization will not occur.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Heat. Strong acids. Strong bases. Strong oxidizing agents.

10.6. Hazardous decomposition products

Hazardous decomposition may occur when heated producing oxides of carbon and nitrogen, volatile hydrocarbon vapors.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Precor 2000 Plus Premise Spray	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 5050 mg/kg
LC50 inhalation rat (mg/l)	> 2.12 mg/l/4h
Vaporizer	Aerosol

GHS-US Properties	Classification
Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	Not classified
Respiratory or skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness.
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration hazard	May be fatal if swallowed and enters airways.

Potential health effects

Inhalation

Acute : May cause drowsiness and dizziness.

Skin

Precor 2000 Plus Premise Spray

Safety Data Sheet

Acute	: Causes skin irritation. May cause an allergic skin reaction in individuals with a sensitivity to n-octyl bicycloheptene dicarboximide and/or piperonyl butoxide.
Eye	
Acute	: Under normal conditions of use, no health effects are expected.
Ingestion	
Acute	: Aspiration hazard - small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.
Mutagenicity	: (s)-Methoprene has been tested and found negative for mutagenicity potential. Permethrin was not mutagenic in a battery of in vitro and in vivo tests. Piperonyl butoxide was not mutagenic in a battery of tests. Phenothrin is not a mutagen. N-octyl bicycloheptene dicarboximide was concluded to be negative in the CHO chromosome aberration assay.
Carcinogenicity	: (s)-Methoprene is not classified as a carcinogen by NTP, IARC or OSHA. Permethrin is not classified as carcinogen by NTP, IARC and OSHA. Piperonyl butoxide is not classified as carcinogen by NTP, IARC and OSHA. Phenothrin is not a carcinogen. N-octyl bicycloheptene dicarboximide is not listed by IARC, NTP, OSHA or ACGIH as a carcinogen.
Reproductive Effects	: (s)-Methoprene is not a reproductive toxin and does not cause birth defects. Permethrin does not cause birth defects or adverse effects on reproduction. Piperonyl butoxide did not produce any birth defects or adverse effects on reproductive parameters in tests with rats and rabbits. Phenothrin is not a reproductive toxicant. N-octyl bicycloheptene dicarboximide has been tested and is not a reproductive toxin.

SECTION 12: Ecological information

12.1. Toxicity

(s)-Methoprene Technical (65733-16-6)	
LC50 Acute fish 1	0.76 mg/l (Exposure time: 96h - Rainbow trout)
LC50 Acute fish 2	> 0.37 mg/l (Exposure time: 96h - Blue gill)
LC50 Acute crustacea 1	0.11 mg/l (Exposure time: 96h - Mysid shrimp)
LC50 Acute crustacea 2	0.36 mg/l (Exposure time: 48h - Daphnia magna)
NOEC Chronic fish 1	0.048 mg/l (Fathead minnow)
NOEC Chronic crustacea 1	0.014 mg/l (Mysid shrimp)
Permethrin (52645-53-1)	
LC50 Acute fish 1	0.00079 mg/l (Exposure time: 96h - Blue gill)
LC50 Acute fish 2	0.0022 mg/l (Exposure time: 96h - Atlantic silverside)
LC50 Acute crustacea 1	0.000019 mg/l (Exposure time: 96h - Mysid shrimp)
LC50 Acute crustacea 2	0.0001 mg/l (Hexagenia bilineata)
NOEC Chronic fish 1	0.0003 mg/l (Fathead minnow)
NOEC Chronic fish 2	0.00083 mg/l (Sheepshead minnow)
NOEC Chronic crustacea 1	0.000039 mg/l (Daphnia magna)
NOEC Chronic crustacea 2	0.000011 mg/l (Mysid shrimp)
Piperonyl butoxide (51-03-6)	
LC50 Acute fish 1	1.9 mg/l (Rainbow trout)
LC50 Acute fish 2	3.94 mg/l (Sheepshead minnow)
LC50 Acute crustacea 1	0.49 mg/l (Mysid shrimp)
LC50 Acute crustacea 2	0.51 mg/l (Gammarus fasciatus (amphipod))
NOEC Chronic fish 1	0.04 mg/l (Fathead minnow)
NOEC Chronic crustacea 1	0.03 mg/l (Daphnia magna)
Phenothrin (26002-80-2)	
LC50 Acute fish 1	0.0027 mg/l (Exposure time: 96h - Rainbow trout)
LC50 Acute fish 2	0.0158 mg/l (Exposure time: 96h - Blue gill)
LC50 Acute crustacea 1	0.000025 mg/l (Exposure time: 96h - Mysid shrimp)
LC50 Acute crustacea 2	0.0044 mg/l (Exposure time: 48h - Daphnia magna)
EC50 Daphnia 1	0.0044 mg/l (Exposure time: 48h - Daphnia magna)
NOEC Chronic fish 1	0.0011 mg/l (Rainbow trout)
NOEC Chronic crustacea 1	0.00047 mg/l (Daphnia magna)
N-Octyl Bicycloheptene Dicarboximide (113-48-4)	
LC50 Acute fish 1	1.4 – 2.4 mg/l
LC50 Acute crustacea 1	2.3 mg/l (Exposure time: 48h - Daphnia magna)

Precor 2000 Plus Premise Spray

Safety Data Sheet

2-Pyrrolidinone, 1-octyl- (2687-94-7)

LC50 Acute fish 1	17.8 mg/l (Exposure time: 96h - Rainbow trout)
LC50 Acute fish 2	22.5 mg/l (Exposure time: 96h - Blue gill)
EC50 Daphnia 1	7.7 mg/l (Exposure time: 48h - Daphnia magna)
EC50 Daphnia 2	19.1 mg/l (Exposure time: 48h - Daphnia magna)

12.2. Persistence and degradability

(s)-Methoprene Technical (65733-16-6)

Persistence and degradability	(s)-Methoprene degrades rapidly in sunlight, both in water and on inert surfaces. The pesticide also is metabolized rapidly in soil and does not leach. Thus, it should not persist in soil or contaminate ground water.
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Permethrin (52645-53-1)

Persistence and degradability	Permethrin: not rapidly biodegradable.
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12.3. Bioaccumulative potential

Permethrin (52645-53-1)

Partition coefficient n-octanol/water (Log Pow)	5.95
Bioaccumulative potential	Permethrin: Bioconcentration factor (BCF) 300; Does not bioaccumulate.

12.4. Mobility in soil

(s)-Methoprene Technical (65733-16-6)

Mobility in soil	Rapidly metabolized in soil under both aerobic and anaerobic conditions (half-life 10-14 days).
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Permethrin (52645-53-1)

Mobility in soil	Permethrin: Immobile in soil
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12.5. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

SECTION 14: Transport information

	UN number	Proper Shipping Name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	UN1950	Aerosols, Flammable	2.1	Not applicable	Not applicable
IMDG	UN1950	Aerosols, flammable (contains Permethrin and Ethoxylated nonylphenol)	2.1	Not applicable	Marine pollutant
IATA	UN1950	Aerosols, flammable	2.1	Not applicable	Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Permethrin (52645-53-1)

Subject to reporting requirements of United States SARA Section 313	
SARA Section 313 - Emission Reporting	1 %

Piperonyl butoxide (51-03-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Subject to reporting requirements of United States SARA Section 313	
SARA Section 313 - Emission Reporting	1 %

Precor 2000 Plus Premise Spray

Safety Data Sheet

Phenothrin (26002-80-2)	
Subject to reporting requirements of United States SARA Section 313	
SARA Section 313 - Emission Reporting	1 %
Distillates (petroleum), hydrotreated light (64742-47-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Ethoxylated nonylphenol, branched (68412-54-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).
2-Pyrrolidinone, 1-octyl- (2687-94-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	P - P - indicates a commenced Premanufacture Notice (PMN) substance.
Propane (74-98-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Butane (106-97-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA Labelling	
EPA Registration Number	2724-490
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 Precautionary statements	KEEP OUT OF REACH OF CHILDREN.
FIFRA Hazards to Humans and Domestic Animals	Avoid contact with skin or clothing. 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.
FIFRA First aid	IF ON SKIN OR CLOTHING: 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. IF SWALLOWED: Immediately call a poison control center or doctor for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give ANY liquid to the person. Do not give anything by mouth to an unconscious person. Note to Physician: Contains petroleum distillate - vomiting may cause aspiration pneumonia.
FIFRA Physical hazards	Contents under pressure. Do not use or store near heat or open flame. Do not puncture or incinerate container. Exposure to temperatures above 130° F may cause bursting.

15.2. US State regulations

No additional information available

SECTION 16: Other information

Date of issue : 20 July 2015
Revision date : 10 November 2020
Supersedes : 16 April 2020

Indication of changes:

Revised Sec. 1: Revised material number(s).

SDS US (GHS HazCom 2012) - CGP

The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.