

1. Identification

Product identifier PRELUDE® TERMITICIDE

Other means of identification

SDS number 364

Product registration number 5481-550

Synonyms Prelude 240™

Recommended use Pyrethroid type termiticide/insecticide

Recommended restrictions For use by individuals/Firms licensed or registered by the state to apply pesticide products. No other uses are advised. Keep out of the Reach of Children!

EPA Registration number EPA: 5481-550

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name AMVAC Chemical Corporation

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Newport Beach, CA 92660

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AMVAC Chemical Corp 949-260-6270(FAX)

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Emergency phone number Medical 888-681-4261
CHEMTREC® 800-424-9300
(USA+Canada)
Product Use 888-462-6822
CHEMTREC® (Outside +1-703-527-3887
USA)

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Acute toxicity, inhalation Category 4

Environmental hazards Hazardous to the aquatic environment, acute hazard Category 1
Hazardous to the aquatic environment, long-term hazard Category 1

OSHA defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Harmful if inhaled.
Very toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention Avoid breathing mist/vapor.
Use personal protective equipment as required.
Use only outdoors or in a well ventilated area.

Response	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical assistance if you feel unwell. Call a POISON CENTER/doctor if you feel unwell. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Collect spillage.
Storage	Store away from incompatible materials. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	This 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 in section 15. The pesticide label also includes other important information, including directions for use.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Permethrin	3-Phenoxybenzyl (1RS,3RS;1RS,3SR)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate	52645-53-1	25.6

Additional components

Chemical name	Common name and synonyms	CAS number	%
Undisclosed Ingredients		N/A	74.4

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	None known. Mild skin irritation. Mild eye irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Foam. Powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Prevent entry into waterways, sewer, basements or confined areas. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Siphon the majority of the liquid into drums for use or disposal, depending on the circumstances.
Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Permethrin (CAS 52645-53-1)	PEL	5 mg/m ³

US. ACGIH Threshold Limit Values

Components	Type	Value
Permethrin (CAS 52645-53-1)	TWA	5 mg/m ³

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Permethrin (CAS 52645-53-1)	TWA	5 mg/m ³

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Chemical respirator with organic vapor cartridge and full facepiece.
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves.
Other	Wear appropriate chemical resistant clothing.
Respiratory protection	Chemical respirator with organic vapor cartridge and full facepiece.
Thermal hazards	Not applicable.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Clear colorless to straw colored liquid
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Physical state	Liquid.
Form	Liquid.
Color	Colorless to straw colored
Odor	Paraffinic solvent odor
Odor threshold	Not available.
pH	6 as a 1% emulsion
Melting point/freezing point	-4 °F (-20 °C) estimated
Initial boiling point and boiling range	Not available.
Flash point	> 212 °F (> 100 °C) Setflash
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	1.1 (solvent)
Flammability limit - upper (%)	7 (solvent)
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	9.75E-01 hPa estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Emulsifies
Solubility (solvents)	Soluble in aromatic solvents
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Bulk density	8 lb/gal
Explosive properties	Not explosive.
Flammability class	Combustible IIIB estimated
Oxidizing properties	Not oxidizing.
Specific gravity	0.96 20 C

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Emits hazardous fumes and smoke of unknown composition when heated to decomposition or burned.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Causes mild skin irritation.
Eye contact	Causes mild eye irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Mild skin irritation. Mild eye irritation.

Information on toxicological effects

Acute toxicity Not known.

Product	Species	Test Results
PRELUDE® TERMITICIDE		
Acute		
Dermal		
<i>Liquid</i>		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
<i>Mist</i>		
LC50	Rat	2.05 mg/l, 4 hr
Oral		
<i>Liquid</i>		
LD50	Rat	3268 mg/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization Not sensitizing.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Permethrin (CAS 52645-53-1) 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Components	Species	Test Results	
Permethrin (CAS 52645-53-1)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	0.0006 - 0.0025 mg/l, 48 hours
Fish	LC50	Apache trout (Oncorhynchus gilae apache)	0.0013 - 0.0022 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Methyl oleate 7.45

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Dispose of container and residues in accordance with all applicable regulations.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number UN3082
UN proper shipping name Environmentally hazardous substances, liquid, n.o.s. (Permethrin)
Transport hazard class(es)
Class 9
Subsidiary risk -
Label(s) 9
Packing group III
Environmental hazards
Marine pollutant No
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Special provisions 8, 146, 335, IB3, T4, TP1, TP29
Packaging exceptions 155
Packaging non bulk 203
Packaging bulk 241

IATA

UN number UN3082
UN proper shipping name Environmentally hazardous substance, liquid, n.o.s. (Permethrin)
Transport hazard class(es)
Class 9
Subsidiary risk -
Packing group III
Environmental hazards Yes, when transported in bulk over large bodies of water
ERG Code 9L
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft Allowed with restrictions.

Cargo aircraft only Allowed with restrictions.

Read safety instructions, SDS and emergency procedures before handling.

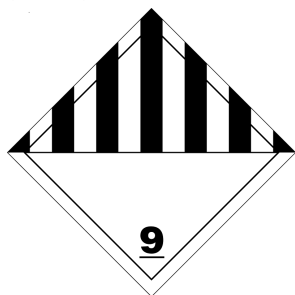
IMDG

UN number UN3082
UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Permethrin), MARINE POLLUTANT
Transport hazard class(es)
Class 9
Subsidiary risk -
Packing group III
Environmental hazards
Marine pollutant Yes
EmS F-A, S-F
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

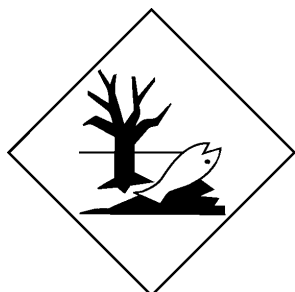
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not established.

DOT; IATA; IMDG



Marine pollutant



General information

IMDG Regulated Marine Pollutant.

This product is not regulated when shipped by highway, rail, or air in non-bulk packaging (maximum capacity of 450 L (119 gallons) or less. When shipped by vessel or in bulk packaging this product is regulated according to the data shown.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. This product is registered under EPA/FIFRA Regulations. It is a violation of Federal Law to use this product in any manner inconsistent with its labeling. Read and follow all label directions. This product is excluded from listing requirements under EPA/TSCA.

This 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.

HAZARD TO HUMANS AND DOMESTIC ANIMALS.

CAUTION! Harmful if swallowed, absorbed through skin or inhaled. Causes eye irritation. Avoid contact with eyes, skin, and clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to aquatic organisms, including fish and invertebrates. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Care should be used when spraying to avoid fish and reptile pets in/around ornamental ponds. This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. See the label for more complete information. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store the product near heat or open flame.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Permethrin (CAS 52645-53-1) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)**SARA 302 Extremely hazardous substance**

Not listed.

SARA 311/312 Hazardous chemical Yes**Classified hazard categories** Acute toxicity (any route of exposure)**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
Permethrin	52645-53-1	25.6

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Contains component(s) regulated under the Safe Drinking Water Act.**US state regulations****California Proposition 65**California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
 A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision**Issue date** May-18-2015**Revision date** Jul-16-2020

References
 ACGIH®: American Conference of Governmental Industrial Hygienists
 CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act
 EPA: Environmental Protection Agency
 FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act
 IARC: International Agency for Research on Cancer
 NTP: National Toxicology Program
 OSHA: Occupational Safety and Health Agency
 SARA: Superfund Amendments and Reauthorization Act
 TSCA: Toxic Substances Control Act
 DOT: Department of Transportation
 IMDG: International Maritime Dangerous Goods
 IATA: International Air Transport Association

Version # 4.1

HMIS® ratings
 Health: 2
 Flammability: 0
 Physical hazard: 0

NFPA ratings
 Health: 2
 Flammability: 0
 Instability: 0

Disclaimer

This information is provided for the limited guidance to the user. While AMVAC believes that the information is, as of the date hereof, reliable, it is the user's responsibility to determine the suitability of the information for its purposes. The user is advised not to construe the information as absolutely complete since additional information may be necessary or desirable when particular, exceptional, or variable conditions or circumstances exist (like combinations with other materials), or because of applicable regulations. No express or implied warranty of merchantability or fitness for a particular purpose or otherwise is made hereunder with respect to the information or the product to which the information relates.

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NFPA is a trademark of the National Fire Protection Association, Inc.

Revision information

Product and Company Identification: Alternate Trade Names

Identification: Recommended restrictions

Regulatory information: US federal regulations

Other information, including date of preparation or last revision: Disclaimer