

# ZENECA Ag Products

## MATERIAL SAFETY DATA SHEET

### PRELUDE Termiticide/Insecticide

Version: 3

Date issued: 01/28/99

MSDS No. US004681\_01

Date printed: 01/29/99

---

### Section 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company : Zeneca Agricultural Products  
1800 Concord Pike  
Wilmington DE 19850

Phone number : (302) 886-1000

Emergency phone : Medical: 800-327-8633 (1-800 FASTMED)  
Chemtrec: 800-424-9300  
Technical: 302-886-3000

Name used on label : PRELUDE Termiticide/Insecticide

Product use : Insecticide

A Registered Trade Mark of a Zeneca Group Company.

---

### Section 2 – COMPOSITION/INFORMATION ON INGREDIENTS

Identity CAS-no.	Typical %	Other information
PERMETHRIN 52645-53-1	25.6 %	Active Ingredient
Other Ingredients	74.4 %	Including Paraffinic solvents and Surfactant blend

Ingredients not precisely identified are proprietary or non hazardous.  
Values are not product specifications.

---

### Section 3 – HAZARDS IDENTIFICATION

Physical hazards:  
None

Health hazards:  
Irritant (eye, skin, respiratory passages).

---

### Section 4 – FIRST AID MEASURES

IF IN EYES:

Immediately flush with plenty of water for at least 15 minutes. If redness, itching or a burning sensation develops, have eyes examined and treated by medical personnel.

# ZENECA Ag Products

## MATERIAL SAFETY DATA SHEET

### PRELUDE Termiticide/Insecticide

Version: 3

Date issued: 01/28/99

MSDS No. US004681\_01

Date printed: 01/29/99

---

#### IF ON SKIN:

Wash material off the skin with plenty of soap and water. If redness, itching or a burning sensation develops, get medical attention. Wash contaminated clothing and decontaminate footwear before reuse.

#### IF SWALLOWED:

Provided the patient is conscious, give 1 or 2 glasses of water to drink. Immediately contact Zeneca's Emergency Information Network at 1-800-F-A-S-T-M-E-D (327-8633). Vomiting should only be induced under the direction of a physician or a poison control center. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomitus, rinse mouth and administer water. Immediately transport victim to an emergency facility.

#### IF INHALED:

Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is labored, give oxygen. If cough or other respiratory symptoms develop, consult medical personnel.

#### MEDICAL ADVICE:

Inducing vomiting to remove this slightly toxic preparation from the stomach can increase the risk of chemical pneumonitis and pulmonary edema secondary to aspiration of the aromatic petroleum solvent.

---

### Section 5 – FIRE FIGHTING MEASURES

---

#### Flash point :

> 212 °F

Method: (Setaflash CC)

#### Autoignition temperature :

No data.

#### Flammable limits (STP): :

No data.

#### EXTINGUISHING MEDIA:

Not applicable. Use media suitable for surrounding fire.

#### PROTECTIVE EQUIPMENT:

Self-contained breathing apparatus with full facepiece and protective clothing.

#### NFPA RATING

Health

1

Fire

1

Reactivity

0

# ZENECA Ag Products

## MATERIAL SAFETY DATA SHEET

### PRELUDE Termiticide/Insecticide

Version: 3

Date issued: 01/28/99

MSDS No. US004681\_01

Date printed: 01/29/99

---

Special

Unusual fire and explosion hazards:  
None known.

---

### Section 6 – ACCIDENTAL RELEASE MEASURES

#### PERSONAL PRECAUTIONS:

Steps to be taken in case material is released or spilled:

Make sure all personnel involved in the spill cleanup follow good industrial hygiene practices. A small spill can be handled routinely. Use adequate ventilation and wear an air-supplied respirator to prevent inhalation. Wear suitable protective clothing and eye protection to prevent skin and eye contact.

#### METHODS FOR CLEANING UP:

Do not allow the material to enter streams, sewers or other waterways. Spread a suitable absorbent such as clay on the spill, and shovel into an open drum.

Generously cover the contaminated areas with common, household detergent (e.g. TIDE, registered trademark of Proctor & Gamble Co.). Using a stiff brush and small amounts of water, work the detergent into the remaining spilled material forming a slurry. Brush the slurry into cracks and crevices and allow to stand for 2-3 minutes. Be careful to completely avoid skin or eye contact. Do not splatter on oneself or bystanders. Spread absorbent on the slurry liquid and shovel mixture into the open drum.

Rinse with small amount of water and use absorbent to collect the wash solution. Shovel into the open drum.

Seal drum and dispose of contaminated material in a facility permitted for hazardous waste. Large spills should be handled according to a spill plan. Otherwise, in case of emergency call, day or night, 800-424-9300, Chemtrec.

---

### Section 7 – HANDLING AND STORAGE

#### REQUIREMENTS FOR STORAGE ROOMS:

Containers should be stored in a cool, dry, well-ventilated area away from flammable materials and sources of heat or flame. Exercise due caution to prevent damage to or leakage from the container.

#### ADDITIONAL INFORMATION:

Do not store near feed, food, or within the reach of children.

---

# ZENECA Ag Products

## MATERIAL SAFETY DATA SHEET

### PRELUDE Termiticide/Insecticide

Version: 3

Date issued: 01/28/99

MSDS No. US004681\_01

Date printed: 01/29/99

---

### Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

---

#### Occupational exposure limits

TLV or suggested control value:

No ACGIH TLV or OSHA PEL assigned. Minimize exposure in accordance with good hygiene practice. Zeneca has established an exposure standard of 10 mg/M3 (8-hour TWA) for Permethrin.

VENTILATION:

This product is intended for use outdoors where engineering controls are not necessary. If use conditions are different (e.g. product reformulation or repackaging), use ventilation adequate to maintain safe levels.

EYE PROTECTION:

Eye contact with the material should be avoided through the use of chemical safety glasses, goggles or a faceshield, selected in regard to exposure potential.

BODY PROTECTION:

This product is FIFRA regulated. Refer to product labeling for end-user Personal Protection requirements.

Skin contact should be prevented through the use of impervious gloves, footwear, long-sleeved clothing, and wide brimmed hat. Remove contaminated clothing and wash before rewearing. Wash separately from other laundry.

RESPIRATORY PROTECTION:

If needed, use MSHA-NIOSH approved respirator for pesticides.

Other protective equipment:

An adequate supply of clean potable water should be available to allow thorough flushing of skin and eyes in event of contact with this compound.

Special precautions or other comments:

Avoid contact with eye, skin and clothing. Avoid breathing vapors or aerosols.

---

### Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

---

Form	: liquid
Physical state	: Emulsifiable Concentrate
Color	: clear, straw-colored
Odor	: aromatic
Boiling point	: 176 °F at 5 mm Hg
Vapor Pressure	: 1.0E-08 at 20 °C Method: mmHg
Vapour density	: 0 (air = 1)
Specific gravity:	: 0.956

# ZENECA Ag Products

## MATERIAL SAFETY DATA SHEET

### PRELUDE Termiticide/Insecticide

Version: 3

Date issued: 01/28/99

MSDS No. US004681\_01

Date printed: 01/29/99

---

Solubility : No data.  
pH-value (quant.) : 6  
(1 w/w%)  
Volatile by volume: :  
No data.

---

### Section 10 – STABILITY AND REACTIVITY

#### HAZARDOUS REACTIONS (CONDITIONS TO AVOID)

Stability:  
Stable under normal conditions.  
Incompatibility:  
Oxidizing agents.  
Hazardous polymerization:  
Will not occur.

#### HAZARDOUS DECOMPOSITION PRODUCTS

Combustion products of dry material: Carbon dioxide, carbon monoxide

---

### Section 11 – TOXICOLOGICAL INFORMATION

#### ACUTE TOXICITY (LETHAL DOSES)

##### LD50 Ingestion male rats

Dose : 3976 mg/kg

##### LD50 Ingestion female rats

Dose : 3628 mg/kg

Additional inform. : Irritation of the mouth, pharynx, esophagus and stomach  
can develop following ingestion.

##### LD50 Skin absorption rabbit

Dose : > 2000 mg/kg

Period : 24-hours

Additional inform. : Systemically toxic concentrations of this product will  
probably not be absorbed through human skin.

##### LC50 Inhalation

Dose : 2.05 mg/l

Additional inform. : Vapors will probably irritate respiratory passages.

#### ACUTE TOXICITY (IRRITATION, SENSITIZATION ETC.)

##### Eye contact rabbit

# ZENECA Ag Products

## MATERIAL SAFETY DATA SHEET

### PRELUDE Termiticide/Insecticide

Version: 3

Date issued: 01/28/99

MSDS No. US004681\_01

Date printed: 01/29/99

---

Results : MILD IRRITANT

Dermal human

Additional inform. : Short contact periods with human skin will probably not produce irritation. Repeated and/or prolonged contact can result in skin irritation. This material was not a skin sensitizer in animal testing.

### GENERAL INFORMATION ABOUT ACUTE OR OTHER TOXICITIES

#### General information

This product is intended for dilution with water for use. Acute toxicological information included in this MSDS is based on test results using the concentrate material.

#### Other effects of overexposure:

Permethrin causes adverse effects on the nervous system of animals which includes hypersensitivity, tremors, unsteady gait, and salivation. Facial erythema (flushing) and facial skin tingling have been described after human exposures. No other adverse clinical effects have been associated with exposure to this material.

---

### Section 12 – ECOLOGICAL INFORMATION

---

#### ADDITIONAL INFORMATION ABOUT ECOLOGY

This material is toxic to fish and wildlife.

---

### Section 13 – DISPOSAL CONSIDERATIONS

---

#### Disposal Method:

Do not contaminate waterways by cleaning of equipment or by disposal of wastes. Untreated effluent should not be discharged where it will drain into lakes, streams, or ponds. Discarded product is not a hazardous waste under RCRA, 40 CFR 261.

#### Container disposal:

Empty container retains product residue. Observe all hazard precautions. Do not distribute or make available, furnish or reuse empty container except for storage and shipment of original product. Remove all product residue from container and puncture or otherwise destroy empty container before disposal.

---

# ZENECA Ag Products

## MATERIAL SAFETY DATA SHEET

### PRELUDE Termiticide/Insecticide

Version: 3

Date issued: 01/28/99

MSDS No. US004681\_01

Date printed: 01/29/99

---

### Section 14 – TRANSPORT INFORMATION

ROAD TRANSPORT DOT

Not regulated by DOT.

---

### Section 15 – REGULATORY INFORMATION

Other regulations, restrictions and prohibitions

TSCA (Toxic Substances Control Act) Regulations, 40CFR 710:

This product is a pesticide and is exempt from TSCA regulation.

CERCLA and SARA Regulations (40 CFR 355, 370, and 372):

Section 313 Supplier Notification. 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:

25.6% permethrin

EPA

EPA Registration no.: 10182-95

---

### Section 16 – OTHER INFORMATION

ZENECA Ag Products believes that the information and recommendations contained herein (including data and statements) are accurate as of the date thereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY, OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates to the specific product designated and may not be valid where such product is used in combination with any other materials or in any process. Further, since the conditions and methods of use of the product and of the information referred to herein are beyond the control of ZENECA Ag Products, ZENECA Ag Products expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.

A vertical bar (|) in the left margin indicates an amendment from the previous version.