Material Safety Data Sheet
U.S. Department of Labor (OSHA 29 CFR 1910.1200)

Manufacturer's Name: **Prentiss Incorporated**
C. B. 2000
Floral Park, NY 11001
Telephone Number: **(516) 326-1919**

Section 1: Chemical Identification

Product: 655-783 Prentox® Perm-X™ 1E
EPA Signal Word: WARNING

Active Ingredient (%): Permethrin (13.3%) (CAS # 52645-53-1)
Chemical Name: 3-(phenoxyphenyl-methyl-(±)-cis, trans-3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropane carboxylate
Chemical Class: Pyrethroid Insecticide

Section 2: Composition/Information on Ingredients

Material:	OSHA PEL	ACGIH TLV	NTP/IARC/OSHA Other	NTP/IARC/OSHA Carcinogen
Permethrin (13.3%)	N/A	N/A	Not Est.	No
Xylene Range Arom. Solv. (77.5%)			50ppm*	No
Contains:				
1,2,4-trimethylbenzene (<25%)	25ppm (125 mg/M^3)	25ppm (123 mg/M^3)	Not Est.	
Xylene (<2.5%) (mixed)	100 ppm (STEL=150 ppm)	100 ppm (STEL=150 ppm)	Not Est.	IARC,3
Cumene (<1.5%)	50 ppm(245 mg/M^3)	50 ppm (246 mg/M^3)	Not. Est.	
*Recommended by manufacturer				
Emulsifier 1 (CAS# N/A)	N/A	N/A	N/A	No
Emulsifier 2 (CAS# N/A)	N/A	N/A	N/A	No

Section 3: Hazards Identification

Primary Routes of Entry: Eye and skin contact.
Causes irreversible eye damage. Prolonged or frequent repeated skin contact may cause allergic reaction in some individuals.

Symptoms of Acute Exposure
Large, toxic doses of the active ingredient in this product administered to laboratory animals have produced central nervous system effects with symptoms that include diarrhea, salivation, bloody nose, tremors and intermittent convulsions. Overexposure to permethrin via inhalation also produced hyperactivity and hypersensitivity.

Section 4: First Aid Measures

Ingestion: Call a physician or Poison Control Center. Do not induce vomiting or give anything by mouth to an unconscious person. Drink promptly a large quantity of **skim** milk, egg whites, gelatin solution, or, if these are not available, large quantities of water. Avoid alcohol. This product contains aromatic petroleum solvent. Aspiration may be a hazard.

Eye Contact: Flush eyes with plenty of water. Get medical attention.
Skin Contact: Wash with plenty of soap and water. Call a physician if irritation persists.
Inhalation: Move person to fresh air. Apply artificial respiration if necessary, preferably mouth to mouth. Get immediate medical attention.

Notes to Physician

Induction of emesis is not recommended due to the large amount of petroleum solvent in this product, which could cause chemical pneumonia if aspirated. If ingested, lavage stomach, taking care to avoid aspiration of stomach contents into lungs. Check for possible mucosal damage before beginning gastric lavage. This product contains a pyrethroid. If a small amount is ingested, or if treatment is delayed, oral administration of large amounts of activated charcoal and a cathartic is probably sufficient therapy. Do not administer milk, cream or other substances containing vegetable of animal fats, which enhance the absorption of lipophilic substances.

Section 5: Fire Fighting Measures

Fire and Explosion

Flash Point (Test Method): 105-112°F (TCC)
Flammable Limits (% in air): Lower: 1.9 Upper: 12.6 @ 77 °F (approximate – solvent)
Autoignition temperature: 880 °F (approximate – solvent)

Unusual Fire, Explosion and Reactivity Hazards

The solvent in this product is a combustible liquid. Can form combustible mixtures at temperatures that are at or above the flash point.

In case of Fire

Use water fog, dry chemical, foam or CO2 extinguishing media. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area and equipment until decontaminated. Use as little water as possible to prevent spread of contaminated runoff.

Section 6: Accidental Release Measures

Wear chemical safety glasses with side shields or chemical goggles, rubber gloves, rubber boots, long-sleeved shirt, long pants, to prevent contact with spilled material. For small spills, cover the spill with an absorbent material such as pet litter. Sweep up and place in an approved chemical container. Wash the spill area with water containing a strong detergent, absorb with pet litter or other absorbent material, sweep up and place in a chemical container. Seal the container and handle in an approved manner. Flush the area with water to remove any residue. Do not allow wash water to contaminate water supplies.

Section 7: Handling and Storage

Store the material in a well-ventilated, secure area, out of the reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco usage, and cosmetic application in areas where there is a potential for exposure to the material. Always wash thoroughly after handling.

Section 8: Exposure Controls/Personal Protection

Ingestion: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Always wash thoroughly after handling.
Eye Contact: To avoid eye contact, wear safety glasses with side shields or chemical goggles.
Skin Contact: To avoid skin contact, wear rubber gloves, rubber boots, long-sleeved shirt, and long pants.
Inhalation: Avoid breathing vapors or mist.

Section 9: Physical and Chemical Properties

Appearance:	Clear, brown, liquid
Odor:	Aromatic solvent
Melting Point:	N/A
Boiling Point:	N/D
Specific Gravity/Density:	0.9102
pH:	4.5-6.0 (1% solution in water @ 25^{o}C)
Solubility in water:	emulsifies
Vapor Pressure:	N/D

Section 10: Stability and Reactivity

Reactivity:

Stability	Stable
Hazardous Polymerization:	Will not occur
Conditions to avoid:	Flame, heat, ignition sources and strong oxidizers or reducing agents.

Hazardous Decomposition Products:
Carbon monoxide and/or carbon dioxide. Chlorine and hydrogen chloride may be formed.

Section 11: Toxicological Information

Acute Toxicity/Irritation Studies

Ingestion:	Oral LD_{50}: >5050 mg/Kg. (practically non-toxic)
Dermal:	Dermal LD_{50}: >5050 mg./Kg. (practically non-toxic)
Inhalation:	4-hour LC_{50}: 2.15 mg/L (practically non-toxic)
Eye Contact:	Corrosive (Rabbit)
Skin Contact:	Slightly irritating (Rabbit)
Skin Sensitization:	Sensitizer
Mutagenic Potential:	Permethrin did not produce any mutagenic effects when tested in the Ames test.
Reproductive Hazard Potential:	Permethrin was not teratogenic when tested in rats.

Chronic/Subchronic Toxicity Studies:

Carcinogenic Potential: A statistically significant increase of lung and liver tumors was observed in female mice receiving diets containing 375 and 750 mg/Kg/day over 85 weeks.

Toxicity of Other Components:

Petroleum solvent: The supplier reports that inhalation of high vapor concentrations (over 1,000 ppm) may cause nervous system effects such as headaches, dizziness, anesthesia and respiratory tract irritation

Emulsifiers: Cause severe eye irritation, which could lead to permanent eye damage. Prolonged or repeated skin contact may cause discomfort and local redness. Mist can irritate the respiratory tract, experienced as nasal discomfort and discharge with chest pain and coughing.

Section 12: Ecological Information

Summary of Effects: Permethrin is highly toxic to fish. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by disposing of equipment washwater. Apply this product only as specified on the label.

Section 13: Disposal Considerations

Disposal: Do not reuse product containers. Dispose of product containers, waste containers, and residues according to Federal, State and local health and environmental regulations.
Characteristic Waste: Ignitable
Listed Waste: N/A

Section 14: Transport Information

DOT Classification:	Pesticides, liquid, toxic, flammable, n.o.s. (permethrin and Petroleum Naphta), 6.1, (3), UN2903, PG III
B/L Freight Classification:	Insecticides: other than poison, NMFC item 102120
International Transportation:	Not Available

Section 15: Regulatory Information

SARA Title III Classification:

Section 311/312:
Acute Health Hazard – Yes
Chronic Health Hazard – Yes
Fire Hazard – No
Sudden release of pressure hazard – No
Reactivity hazard – No

Section 313 chemicals:

Permethrin (13.3%)	(CAS # 52645-53-1)
1,2,4-trimethylbenzene (<25%)	(CAS # 95-63-6)
Mixed Xylenes (<2.5%)	(CAS # 1330-20-7)
Cumene (<1.5%)	(CAS # 98-82-8)

This product contains a toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III and of 40 CFR 372. Any copies or redistribution of this MSDS must include this notice.
Proposition 65: Not applicable
RCRA Classification: Ignitable
TSCA Status: Exempt from TSCA

Section 16: Other Information

NFPA Hazard Ratings:

Health	2	0	Least
Flammability	2	1	Slight
Reactivity	1	2	Moderate
		3	High
		4	Severe

Date Prepared: August 20, 1998
Supersedes: December 19, 1994
Reason: Complete Revision.

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.