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

Section I: Product Identification

Product: **655-777 Prentox(R) 5 Lb. Malathion Spray**

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

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Reason: Revision of section II.

Section II: Hazardous Ingredients/Identity Information

Hazardous Components:		OSHA PEL	ACGIH TLV	%
Malathion (CAS # 121-75-5) (<>)		15 mg/M³	10 mg/M³	57.0
(*O*,*O*-dimethyl dithiophosphate of diethyl mercaptosuccinate)		(Skin) (TWA)		
Xylene Range Aromatic Solvent (CAS # 64742-95-6)		See below		34.0
Contains the following SARA listed ingredients, by weight (typical):				
1,2,4-Trimethyl Benzene (CAS # 95-63-6)(<>)	32.0	(TWA) 25 ppm		
Mixed Xylenes (CAS # 1330-20-7)(<>)	3.0	(TWA) 100 ppm		
Cumene (CAS # 98-82-8)(<>)	1.5	(TWA) 50 ppm		
Ethyl Benzene (CAS # 100-41-4)(<>)	0.5	(TWA) 100 ppm		
Emulsifier (CAS # N/A)		N/D		6.00

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 <u>must</u> include this notice.

Section III: Physical/Chemical Characteristics

Boiling Point: N/D
Specific Gravity (H_2O = 1): 1.0604
Vapor Pressure (mmHg): N/D
Melting Point: N/D
Vapor Density (Air = 1): N/D
Evaporation Rate (Butyl Acetate = 1): N/D
Solubility in Water: Emulsifies.
Appearance and Odor: Water white to yellow liquid, mercaptan like odor.

Section IV: Fire and Explosion Hazard Data

Flash Point (Method Used): 113° F. closed cup.
Flammable Limits: **LEL:** 1.9 **UEL:** 12.6 (Solvent - approximate)
NFPA Hazard Ratings: Health: 2 **Flammability:** 2 **Reactivity:** 1
Extinguishing Media: Dry chemical, CO_2, foam.

Special Fire Fighting Procedures: Keep containers cool by spraying with water if exposed to fire. Fight fires from upwind. This pesticide is toxic to aquatic invertebrates and aquatic life stages of amphibians. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or public waters. Do not use heavy streams of water in order to prevent spread of contaminated runoff. Wear self contained breathing apparatus.

Unusual Fire and Explosion Hazards: Malathion decomposes when heated above 100° C. Explosions of sealed containers may occur. May give off phosphorus pentoxide, CO, CO_2, malaoxon and sulfides upon exposure to high temperatures.

Section V: Reactivity Data

Stability: Stable.
Conditions to avoid for stability: Avoid storage at temperatures in excess of 78° F. for best stability.
Incompatibility: Alkalies, iron and strong oxidizers.
Hazardous Decomposition or Byproducts: CO, CO_2, phosphorus pentoxide, malaoxon, dimethyl sulfide, sulfur dioxide, and oxides of nitrogen.
Hazardous Polymerization: Will not occur.
Conditions to avoid for Hazardous Polymerization: None.

Section VI: Health Hazard Data

Routes of Exposure:
- **Inhalation:** Yes.
- **Skin:** Yes.
- **Ingestion:** Yes.

Health Hazards (Acute and Chronic): Harmful if swallowed. Acute exposure may cause death due to cholinesterase inhibition. Toxicity of other components: This product contains a Xylene Range Aromatic Solvent composed of xylenes, ethylbenzenes and aromatic naphtha containing trimethylbenzenes. Inhalation of solvent vapors at high concentrations can cause central nervous system depression, respiratory tract irritation, asphyxiation, cardiac stress, and coma. Exposure to extremely high levels of xylenes may cause kidney or liver damage.

Carcinogenicity:
- **NTP:** No.
- **IARC Monographs:** No.
- **OSHA Regulated:** No.

Signs and Symptoms of Overexposure: Headaches, nausea, vomiting, cramps, weakness, blurred vision, pin-point pupils, tightness in chest, labored breathing, nervousness, sweating, watering of eyes, drooling or frothing of mouth and nose, muscle spasms and coma.

Medical Conditions Generally Aggravated by Exposure: Repeated exposures to cholinesterase inhibitors such as this product may, without warning, cause increased susceptibility to doses of any cholinesterase inhibitor.

Emergency and First Aid Procedures: If swallowed, Call a physician or Poison Control Center immediately. Do not induce vomiting. **If on skin**, wash thoroughly with soap and hot water. **If inhaled**, remove person to fresh air, apply artificial respiration, if indicated. **If in eyes**, flush eyes with plenty of water. Get prompt medical attention.

Note to physician: Malathion upon repeated, prolonged or careless use may cause cholinesterase inhibition. Atropine is antidotal.

Section VII: Precautions for Safe Handling and Use

Steps to be taken in case material is released or spilled: Wear protective equipment as required to prevent contact with the product or its vapors. Cover the spilled areas with generous amounts of absorbent material, such as clay, diatomaceous earth, sand or sawdust. Sweep the contaminated absorbent onto a shovel and put the sweepings into a salvage drum. Dispose of wastes as below. Place any leaking container into a similar drum or glass container.
Waste disposal method: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. **Container disposal:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.
Precautions for handling and storage: Do not contaminate water, food or feed. Wash hands, arms and face with soap and water after use and before eating or smoking. Remove contaminated clothing and wash with soap and hot water before reuse.
Other precautions: Harmful if swallowed. Avoid breathing of vapors. Avoid contact with skin. Avoid contamination of water, feed or foodstuffs. Periodically inspect stored materials.

Section VIII: Control Measures

Respiratory protection: Use an approved pesticide respirator protecting against organophosphorus vapors.
Ventilation:

- **Local Exhaust:** As required to meet TLV values.
- **Special:** None.
- **Mechanical:** As required to meet TLV values.
- **Other:** None.

Protective Gloves: Chemical resistant.
Eye Protection: Safety glasses or goggles.

Other protective clothing or equipment: Wear waterproof clothing designed to prevent eye and skin contact.
Work/Hygienic practices: Wash thoroughly after handling and before eating or smoking. Persons working with this product for long periods of time, or on a frequent basis, should have frequent blood tests of their cholinesterase levels. If the cholinesterase falls below the critical point, no further exposure should be allowed until it has been determined by means of blood tests the cholinesterase levels have returned to normal. Before removing gloves, wash them with soap and water.

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.