

## MALATHION-OIL CITRUS & ORNAMENTAL SPRAY SAFETY DATA SHEET

Manufacturer's Name & Address  
Southern Agricultural Insecticides, Inc.  
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### I NOMENCLATURE

Product Name: MALATHION OIL CITRUS & ORNAMENTAL SPRAY EPA Reg. No.829 175  
Chemical Name: Mixture of Malathion (O,O-Dimethyl-S-(1,2-di(ethoxycarbonyl)-ethyl)  
Phosphorodithioate and mineral spray oil  
Chemical Family: Organophosphate pesticide

<u>II HAZARDOUS INGREDIENTS</u>	<u>CAS No.</u>	<u>nominal %</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Malathion	121-75-5	5.4%.	. 10 mg/m3	10 mg/m3
Severely hydrated paraffinic oil (C18-C20)	72623-84-8 72623-87-1 84741-88-4	75.0%.	. 5mg/m3(oil mist)	5mg/m3

### III PHYSICAL PROPERTIES (N.D.=Not determined)

Boiling Point: ND  
Vapor Pressure: N.D.  
Vapor Density: (air=1) ND  
Solubility In Water: Emulsifies.  
Appearance/Odor: Oily, amber liquid with mineral oil odor.

Density: 7.33 lb/gal  
Percent Volatile: (by volume) N.D.  
Evaporation Rate: N.D.  
Reactivity in Water: Stable pH 2-7

### IV FIRE AND EXPLOSION DATA

Flash Point: Approximately 165°F  
Extinguishing Media: CO<sub>2</sub>, dry chemical, foam, Water spray cool containers. A water stream may spread flames.  
Special Fire Fighting Procedures: Fight fire upwind. Dike to prevent water runoff. Firemen should wear self contained breathing apparatus and protective clothing. Decontaminate clothing with liquid chlorine bleach.  
Unusual Fire & Explosion Hazards: Vapors and fumes are hazardous. Evacuate people downwind from fire. Vapors can form explosive mixtures with air. Thermal Decomposition Products: Dimethyl sulfide, SO<sub>2</sub>, CO<sub>2</sub>, CO, and phosphorous pentoxide. Avoid breathing smoke and fumes. Malathion rapidly decomposes above 100 °C creating some risk of explosion..

### V FIRST AID

EYE Exposure: Flush eyes a gentle stream of clean water for at least 15 minutes. Hold eye lids apart to ensure washing underside of lids. Remove contact lenses while rinsing.. Get medical attention.  
SKIN Exposure: Wash with soap and water. Change to clean clothing. Scrub finger nails clean with soap and water. Get medical attention if skin irritation occurs.  
INHALATION: Remove victim to fresh air. Restore breathing if necessary. Get medical attention.  
If SWALLOWED: Get medical attention immediately. If subject is conscious force liquids and give activated charcoal tablets. Do not give anything by mouth to an unconscious person. Do not induce vomiting without advice of physician. (contains petroleum oil.)  
SYMPTOMS of OVER-EXPOSURE: Weakness, headache, tightness of chest, blurred vision, pin-point pupils, excessive salivation, excessive sweating, nausea, vomiting, diarrhea, and abdominal cramps. If symptoms of poisoning occur, get prompt medical attention.  
Note to physician: Malathion is a cholinesterase inhibitor, if symptoms of cholinesterase inhibition are present; ANTIDOTE: Administer atropine sulfate in large doses. Two to Four mg intravenously or intramuscularly as soon as cyanosis is overcome. Repeat at 5 to 10 minute intervals until signs of atropinization appear. 2-Pam chloride is a pharmacological antidote and may be administered as an adjunct to, but not a substitute for atropine. Do not give morphine or tranquilizers. At first sign of pulmonary edema, patient should be given supplemental oxygen and treated symptomatically. Continued absorption of Malathion may occur after initial improvement. Very close supervision of patient is indicated for at least 48 hours.

**VI TOXICITY DATA**

Route of Entry- Ingestion LD50 oral (rat) >5500 mg/kg (malathion technical)  
Skin LD50 dermal (rat) > 2000 mg/kg (malathion technical)  
Inhalation LC50 inhalation, rat, > 5.2 mg/l 4 hr (malathion technical)  
Irritancy Slightly irritating to eyes & skin. Not a sensitizer to guinea pigs.  
Carcinogenicity of Malathion IARC group 3 Not classifiable as to carcinogenicity for humans  
No constituents listed as a carcinogen : OSHA, IARC, NTP  
Oral LD50 for spray oil in formulation >5000 mg/Kg

**VII REACTIVITY**

Stability: Stable under normal storage conditions. Conditions to Avoid: Temperatures above 120°F.  
Materials to Avoid: Strong alkalis and strong oxidizers.  
Hazardous Polymerization: not expected.

**VIII SPILL OR LEAK PROTECTION**

Contain in smallest area by diking with absorbent material. Do not allow to enter sewer or drain. Provide ventilation or respiratory protection during clean up. Treat contaminated area with liquid bleach. Let stand for 15 minutes. Repeat procedure, then flush area with water. Wear protective clothing (section IX) during clean up. Waste Disposal: Absorb on clay or soda ash and place in waste disposal container. Dispose of absorbed material in accord with Federal, State, and local regulations. Note: User should follow label instructions for disposal of unused product and container disposal.

**IX SPECIAL PROTECTION**

Respiratory: Type/Conditions; Avoid breathing vapors or spray mist. For repeated, prolonged, or commercial use wear a NIOSH-approved chemical cartridge or full face respirator with pesticide canisters.  
Ventilation: General (acceptable) Local Exhaust (Preferable)  
Gloves: Chemical resistant, such as barrier laminate, butyl rubber, nitrile rubber, or Viton.  
Eye Protection: Chemical goggles or safety glasses with side shields.  
Other Protective Equipment: Freshly laundered body covering clothing, shoes and socks. Launder clothing separately from household laundry..

**X SPECIAL PRECAUTIONS**

Handling Precautions: Avoid damage to containers. Do not handle damaged or leaking containers without protective equipment. Wash thoroughly after handling and before eating or smoking.  
Storing Precautions: Store in a cool, safe, place away from feed or food-stuffs. Do not store in warehouses where temperatures exceed 100°F for extended periods. KEEP AWAY FROM CHILDREN

**XI TRANSPORTATION & SELECTED REGULATORY**

Product not regulated by DOT in packing sizes offered.  
Freight Class: Insecticides NOI, O/T Poison NMFC 102120  
SARA TITLE III Malathion, CAS# 12175-5 Sec 304 CERCLA RQ 100 lb.

This information relates solely to the designated product and is not inclusive for combinations with other materials. This information is given without warranty or representation. Information is based on data we believe to be correct as of the date hereof. This information is furnished solely for your consideration, investigation, and verification. Before using any product, READ THE LABEL.

RE: B.V.A. Spray Oil MSDS 9/95, Cheminova, MSDS Fyfanon 2/95, CFR 29 1910.1200 7/95,