

# Material Safety Data Sheet

## 1. CHEMICAL PRODUCT and COMPANY IDENTIFICATION

Walla Walla Environmental, Inc.  
4 West Rees Ave.  
Walla Walla, Wa 99362  
UNITED STATES OF AMERICA

### Emergency Telephone Number:

In case of medical, environmental or transportation emergencies or inquiries, call: 1-800-247-9011

**Product Name:** BUG-JUICE INSECTICIDE PAINT ADDITIVE  
**Chemical Name:** Mixture; active ingredient, deltamethrin\*  
**Version Date:** July 1, 2003  
**Page:** 1 of 6  
**MSDS Number :** 47332-11

\*CHEMICAL NAME: Mixture; active ingredient, deltamethrin:  
(s)-alpha-cyano-3-phenoxybenzyl-(1R,3R)-3-(2-2-dibromovinyl) -2,2-dimethyl-cyclopropanecarboxylate

PRODUCT DESCRIPTION: BUG JUICE concentrate is an insecticide additive for latex paint, oil base paint, stains and sealers.

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

**Component CAS number % Deltamethrin 52918-63-5 4.75%**  
Other ingredients 95.25%

This product contains no hazardous inert ingredients as defined by the OSHA Hazard Communications Standard (29 CFR 1910.1200) or WHMIS regulations.

## 3. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW:

A white odorless liquid.

- Contact with product may result in transient tingling and reddening of the skin.
- This product is extremely toxic to fish and aquatic invertebrates.

### **POTENTIAL HEALTH EFFECTS SIGNS AND SYMPTOMS OF EXPOSURE:**

Acute overexposure may result in respiratory irritation and transient paresthesia. It has produced ataxia, salivation, tremors, convulsions and respiratory depression in laboratory animal tests.

### IMMEDIATE EFFECTS

**SKIN:** Contact with product may result in transient tingling and reddening of the skin.

**EYES:** May cause slight irritation.

**INHALATION:** Harmful if inhaled.

## 4. FIRST AID MEASURES

**After contact with eyes:** Flush eyes with plenty of water. Get medical attention if irritation persists.

**After inhalation:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

## 5. FIRE FIGHTING MEASURES

### **FLAMMABLE PROPERTIES**

Flash point: Does not flash

### **Advice on protection against fire and explosion:**

FLAMMABILITY CLASSIFICATION/RATING:

NFPA/OSHA Class: III B

NFPA Rating (Fire): 1

**Suitable extinguishing media:**

Carbon dioxide, dry chemical, foam or water.

**Extinguishing media that must not be used for safety reasons:**

**FIRE FIGHTING INSTRUCTIONS:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent) and full protective gear. Keep upwind. Isolate hazard area. Avoid inhalation of smoke and fumes. Use water or foam to reduce fumes. Do not touch spilled material. If possible, move containers from area. Extinguish only if flow can be stopped. Use flooding amounts of water as a fog. Cool containers with flooding amounts of water from as far a distance as possible. Avoid breathing vapors.

## **6. ACCIDENTAL RELEASE MEASURES**

**GENERAL AND DISPOSAL:** Use proper protective equipment to minimize personal exposure (see Section 8). Take all necessary action to prevent and to remedy the adverse effect of the spill. Ensure that the disposal is in compliance with all Federal, State/Provincial, and local regulations (see Section 13 for applicable RCRA Number). Refer to Section 15 for applicable Reportable Quantity (RQ) and other regulatory requirements.

**Additional information:**

**LAND SPILL OR LEAK**

**Small Spills:** Absorb with an inert absorbent material such as granular clay, saw dust, or pet litter. Sweep up carefully while avoiding the formation of a dust cloud. Place in an approved chemical waste container for disposal. Rinse spill area with small amount of soapy water. Contain and absorb the rinsate with inert absorbents and place into the same disposal container. Area can be washed with water to remove the last trace residue. Do not allow water to contaminate water supplies or sewers. **Large Spills:** Eliminate all ignition sources. Stop leak if you can do so without coming into contact with spilled material. Dike far ahead of liquid spill for later disposal. All equipment used to clean up spill should be grounded.

**Additional information:** Prevent entry into waterways, sewers, basements or confined areas. Inform appropriate authorities immediately if contamination occurs. Contact Walla Walla Environmental for further assistance if necessary.

## **7. HANDLING and STORAGE**

**Handling:** Avoid breathing vapors or spray mist.

**Storage:** Do not contaminate water, food or feed by storage. Store in a cool, dry place.

## **8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Additional advice on system design:**

**ENGINEERING CONTROLS**

Control airborne concentrations below the appropriate exposure guideline (see below for any applicable OSHA/ACGIH Exposure Limits). Local exhaust ventilation may be necessary.

**Hygiene measures:**

Wash thoroughly after handling.

Avoid skin contact.

**Eye protection:**

Wear safety glasses.

**Respiratory protection:**

Ensure good ventilation. .

## **9. PHYSICAL and CHEMICAL PROPERTIES**

**APPEARANCE:** A white liquid

**ODOR:** Odorless

**BASIC PHYSICAL PROPERTIES**

**PHYSICAL STATE:** Liquid

**PH:** 6.6 in suspension

**VAPOR PRESSURE:** Not available

**VAPOR DENSITY (AIR=1):** Not available

EVAPORATION RATE (BUTYL ACETATE = 1): Not available  
SPECIFIC GRAVITY OR DENSITY: 1.053 @ 20°C  
PACKING (BULK) DENSITY: Not available  
BOILING POINT/RANGE: Not available  
MELTING/FREEZING POINT RANGE: Not available  
SOLUBILITY (IN WATER): Suspends  
SOLUBILITY IN SOLVENTS/OIL (SPECIFIED): Not available  
DUST EXPLOSION SEVERITY DATA: Not applicable  
MINIMUM IGNITION ENERGY (MJ): Not available  
MINIMUM EXPLOSION CONCENTRATION (MEC): Not available  
LIMITED OXYGEN CONCENTRATION (LOC): Not available  
VISCOSITY: 1650 mPa's @ 20°C

## **10. STABILITY and REACTIVITY**

**CHEMICAL STABILITY:** Stable

**INCOMPATIBILITY:** Strong oxidizing and reducing agents.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition products might include carbon monoxide and carbon dioxide.

**HAZARDOUS POLYMERIZATION:** Will not occur

## **11. TOXICOLOGICAL INFORMATION**

THE FOLLOWING DATA WERE DEVELOPED WITH: DELTAMETHRIN TECHNICAL 99.00%

### ACUTE TOXICITY

ORAL LD50 (rat): > 15,000 mg/kg (practically non-toxic)  
DERMAL LD50 (rabbit): > 10,000 mg/kg (practically non-toxic)  
INHALATION LC50 (rat, 4hr): 1.02 mg/L (slightly toxic)  
EYE IRRITATION (rabbit): non-irritating  
(Max. Avg. Score = 0.33)  
SKIN IRRITATION (rabbit): non-irritating  
(Primary Irr. Index = 0.04)  
SKIN SENSITIZATION (guinea pig): non-sensitizing

NOTE: The severity classifications listed above are those of Walla Walla Environmental, and, particularly for eye irritation, may not always coincide with EPA-mandated Precautionary Statements.

THE FOLLOWING DATA WERE DEVELOPED WITH: Bug Juice, the active ingredient CHRONIC TOXICITY AND CARCINOGENICITY

General neurological symptoms were exhibited in studies with rats, mice and dogs. These symptoms included unsteadiness, abnormal gait, tremors and liquid feces. No histopathologic findings were observed except some signs of slight hepatotoxicity in mice. No Observable Effect Levels (NOEL's) were 1 mg/kg/day in the 2-year rat and dog studies.

The NOEL for the 2-year mouse study was approximately 12 mg/kg/day. Bug Juice was not carcinogenic in rats or mice.

### REPRODUCTIVE AND DEVELOPMENTAL TOXICITY

No developmental effects were observed in studies with rabbits in the absence of maternal toxicity. The development NOEL for the rat study was 11 mg/kg/day (highest dose tested). The developmental NOEL in rabbits was 25 mg/kg/day. A 2-generation reproductive study with rats produced clinical signs of toxicity, reduced body weight gain and mortality in both parents and offspring. The parental and reproductive (offspring) NOEL's were 80 ppm, which is equivalent to approximately 4 mg/kg/day for adults and 18 mg/kg/day for the offspring.

### NEUROTOXICITY

BUG JUICE does not inhibit acetylcholinesterase. Neurobehavioral effects including unsteadiness, excessive salivation, vomiting, liquid feces, uncoordinated movement, tremors, spasmodic convulsions which are typically related to Central Nervous System (CNS) stimulation, were observed in some studies. The NOEL for these studies was 1 mg/kg/day or higher.

### MUTAGENICITY (GENETIC EFFECTS)

No evidence of genotoxicity was observed in a battery of in vitro and in vivo studies.

## **12. ECOLOGICAL INFORMATION**

### ENVIRONMENTAL PRECAUTIONS

This product is extremely toxic to fish and aquatic invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office.

THE FOLLOWING DATA WERE DEVELOPED WITH: DELTAMETHRIN TECHNICAL 99.00%

### ECOLOGICAL TOXICITY

Deltamethrin Technical is highly toxic to fish and other aquatic species, however, the toxicity to avian species is relatively low.

#### Avian

Bobwhite Quail (LD50): > 2250 mg/kg

Bobwhite Quail (dietary LC50): > 5620 ppm

Mallard Duck (dietary LC50): > 8039 ppm

Quail Reproduction (repro NOEL): 450 ppm

Duck Reproduction (repro NOEL): 450 ppm

#### Aquatic

Rainbow Trout (96-Hour LC50): 0.26 ppb

Bluegill Sunfish (96-Hour LC50): 0.17 ppb

Sheepshead Minnow (96-Hour LC50): 0.48 ppb

Eastern Oyster (96-Hour LC50): 8.2 ppb

Mysid Shrimp (96-Hour LC50): 4.6 ppt; NOEC = 1. ppt

Mollusk Shell Deposition (EC50): 8.2 ppb

Chronic Toxicity-Fathead Minnow: MATC = 24 ppt

Chronic Daphnia Toxicity: MATC = 6.0 ppt

### ENVIRONMENTAL FATE

The major routes of dissipation are soil binding and soil microbial degradation. Although soil binding is strong, it is not immediate. It appears that spray drift is the only significant route of exposure to aquatic organisms. However, deltamethrin's strong binding capacity to slime, plants, sediment, etc. might rapidly prevent the availability of deltamethrin for bioconcentration in aquatic systems. Additionally, its insolubility in water will be a factor in limiting its bioconcentration as well. Bug Juice hydrolyzes under alkaline conditions. Leaching studies indicate that Bug Juice is immobile.

THE FOLLOWING DATA WERE DEVELOPED WITH: Bug Juice

Technical Water Solubility: < 0.20 micrograms/l @ 25°C

Hydrolytic Half-Life: 2.28-2.70 days @ pH 9.0

Photolytic Half-Life: 64-86 days (water); 9 days (soil)

Soil Half-Life: 14-40 days (cropped plots); 37-69 days (bare ground) in field dissipation studies

Kads: 960 - 4750 depending on soil type

Koc: 204,000-577,000 depending upon soil type

Bioconcentration Factor (BCF in bluegill sunfish): 189-3630x

### **13. DISPOSAL CONSIDERATIONS**

Do not contaminate water, food or feed by disposal. Pesticide Disposal: 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: Do not reuse empty container. Wrap container with paper and put in trash collection.

#### **RCRA CLASSIFICATION:**

RCRA HAZARDOUS WASTE INGREDIENTS: None

### **14. TRANSPORT INFORMATION**

PROPER SHIPPING NAME: Not DOT regulated.

NOTE: For transport purposes (49 CFR Part 173.132), the calculated 1-Hour LC50 (Rat) is: 4.08 mg/l.

### **15. REGULATORY INFORMATION**

#### STATE REGULATIONS

CALIFORNIA (Proposition 65): This product does not contain any chemical which is known to the State of California to cause cancer or birth defects or other reproductive harm. The following chemicals associated with the product are subject to the right-to-know regulations in these states: No components regulated

#### U.S. FEDERAL REGULATIONS

EPA Registration Number: 47332-11

CARCINOGENICITY: NTP: No IARC: No OSHA: No

SARA TITLE III SECTION 311/312 - HAZARD CLASSES:

Acute Health Hazard - Yes

Chronic Health Hazard - No

Fire Hazard - No

Sudden Release of Pressure Hazard - No

Reactivity Hazard - No

SARA TITLE III - NOTIFICATIONS AND INFORMATION

Section 302 (EHS) ingredients: None

Section 304 (CERCLA & EHS) ingredients (RQ): None

SARA 313 : No components listed

#### WHMIS INGREDIENT DISCLOSURE LISTED COMPONENTS:

CPC NUMBER: None

WHMIS Classification for Control Product Regulations (CPR):

Registered pesticide under US FIFRA regulations; exempt from CPR classification.

The MSDS contains all CPR required hazard-related information.

WHMIS HAZARD RATING: See HMIS rating (Section 16)

### **16. OTHER INFORMATION**

#### **HAZARD RATINGS**

HEALTH FLAMM REACT OTHER

NFPA 1 0 0

HMIS 1 0 0 B

#### **REVISED SECTIONS:**

PREPARED BY: Regulatory Department

PHONE: 800-247-9011

#### **DISCLAIMER:**

This information is provided in good faith but without express or implied warranty. Buyer assumes all responsibility for safety and use not in accordance with label instructions.