MATERIAL SAFETY DATA SHEET

DATE PREPARED: 07/29/1999

MSDS No: 6100

Concentrate Bug-B-Gon Multi-Purpose Insect Killer

1. CHEMICAL PRODUCT AND COMPANY **IDENTIFICATION**

PRODUCT NAME: Concentrate Bug-B-Gon Multi-Purpose Insect Killer

PRODUCT DESCRIPTION: Insecticide

MANUFACTURER

The SOLARIS Group of Monsanto Company P.O. Box 5008 San Ramon, CA 94583-0808

24 HR. EMERGENCY TELEPHONE NUMBERS

Emergency Phone 800-225-2883

EPA REG. NO.: 1021-1645-239 PN: PN6071

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name

Esfenvalerate

Wt.%

CAS#

0.42 66230 -04-4

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: CAUSES SKIN IRRITATION AND MODERATE **EYE IRRITATION** DO NOT GET ON SKIN, EYES OR CLOTHING HARMFUL IF INHALED OR ABSORBED THROUGH SKIN AVOID BREATHING VAPOR OR SPRAY MIST. KEEP OUT OF REACH OF CHILDREN

POTENTIAL HEALTH EFFECTS
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EYES: This product is moderately irritating to the eyes. Eye contact may include discomfort, tearing, swelling redness, and blurred vision. See Toxicology Information, Section 11.

SKIN: This product causes skin irritation. This product is harmful to internal organs if absorbed through the skin. The degree of injury will depend on the duration of exposure and amount absorbed. See Toxicological Information, Section 11.

INGESTION: This substance is slightly toxic to internal organs if swallowed. This product contains a petroleum distillate. Because of the low viscosity of the petroleum distillate, it can directly enter or be aspirated into the lungs either during swallowing or vomiting the substance. Once in the lungs, the substance is very difficult to remove and can cause severe injury to the lungs and death. See Toxicology Information, section 11.

INHALATION: This substance is harmful to internal organs if inhaled. The degree of injury will depend on the airborne concentration and duration of exposure. This substance may be irritating if inhaled. See Toxicology Information, section 11.

COMMENTS HEALTH: This product contains esfenvalerate, a cyano-pyrethroid that has the potential to cause temporary dermal paresthesis, e.g. burning, tingling, stinging sensations, that may occur following overexposure. However, using spray dilutions as indicated on the product label, it is unlikely that skin exposure to the spray mist will deliver sufficient concentrations of the active ingredient to trigger the dermal symptoms.

4. FIRST AID MEASURES

EYES: Flush eyes with plenty of water. If irritation persists, see a doctor.

SKIN: Wash skin thoroughly with soap and water after handling. Get medical attention if irritation persists.

INGESTION: If swallowed call a doctor or Poison Control Center immediately. Do not induce vomiting because the petroleum solvent may be aspirated into the lungs.

INHALATION: If respiratory discomfort or irritation occurs, move person to fresh air. Apply artificial respiration if indicated. See a doctor if discomfort or irritation continues.

NOTES TO PHYSICIAN: Note to Physician: The product contains a significant amount of petroleum distillate, therefore ingestion of this material or subsequent vomiting can result in aspiration which can cause chemical pneumonitis. The product also contains a cyano-pyrethroid that has been associated with transient dermal paresthesias in cases of extensive skin contact. Medical Information call day or night 1-800-225-2883.

ADDITIONAL INFORMATION: Medical Information: Call day or night, 1-800-225-2883

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: 140°F TAG CC

EXTINGUISHING MEDIA: C02, dry chemical, and foam.

FIRE FIGHTING PROCEDURES: Treat as an oil fire. Use a full-faced self-contained breathing apparatus along with full protective gear. Keep nearby containers and equipment cool with a water spray. Contain the run-off, if possible, for proper disposal.

FLAMMABLE LIMIT: Not Established

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: While wearing rubber gloves, soak up spilled material with paper towels and discard in trash.

LARGE SPILL: Liquid spills on floor or other impervious surfaces should be contained or diked, and should be absorbed with attapulgite, bentonite or other absorbent clays. Collect contaminated absorbent, place in plastic-lined metal drum and dispose of in accordance with instructions provided under Section 13. "DISPOSAL". Thoroughly scrub floor or other impervious surface with a strong industrial type detergent solution and rinse with water.

For liquid spills that soak into the ground, contact the applicable Federal, State and or County Health Dept. for disposal recommendations. If disposal is required then refer to Section 13 "DISPOSAL" for instructions.

Leaking containers should be separated from non-leakers and either the container or its contents transferred to a drum or other non-leaking container and disposed of in accordance with instructions provided under Section 13 "Disposal". Any recovered spilled liquid should be similarly collected and disposed of.

Do not contaminate water, foodstuffs or feed by storage or disposal.

GENERAL PROCEDURES: Observe all protection and safety precautions when cleaning up spills -- see Section 8. "EXPOSURE CONTROLS/PERSONAL PROTECTION". For help with any spill, leak, fire or exposure involving this material, call day or night (800) 225-2883.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Avoid contamination of feed and foodstuffs. Store in a cool, dry place, preferably locked storage area.

STORAGE: During storage, protect from contact with acids.

Bulk storage of this product should be in stainless steel tanks which are fitted with a conservation vent to prevent free exchange between the tank and the atmosphere.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Use this material only in well ventilated areas.

PERSONAL PROTECTION

EYES AND FACE: Do not get this material in your eyes. Eye contact can be avoided by wearing chemical goggles.

SKIN: No special skin protection is usually necessary. Avoid prolonged or frequently repeated skin contact with this material. Skin contact can be minimized by wearing protective clothing. Wash throughly with soap and water after handling.

RESPIRATORY: No special respiratory protection is normally required.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Odor of petroleum solvent.

APPEARANCE: Pale Yellow liquid.

BOILING POINT: Not Established

SPECIFIC GRAVITY: 0.841 at 20°C

COMMENTS:

WATER SOLUBILITY: Emulsifiable in water

10. STABILITY AND REACTIVITY

STABLE: YES

HAZARDOUS POLYMERIZATION: NO

CONDITIONS TO AVOID: Heat and acidic or alkaline conditions may cause this product to break down. Contact with strong oxidizers may produce an explosive mixture.

HAZARDOUS DECOMPOSITION: None known.

11. TOXICOLOGICAL INFORMATION

ACUTE

EYES: Found to be moderately irritating to rabbit eyes; irritation cleared by 48 hours. EPA FIFRA toxicity category - III.

DERMAL LD₅₀: Rabbit: > 2.0 gm/kg. EPA FIFRA toxicity category - II. Due to observable effects other than score. SKIN IRRITATION: Rabbit: Negligble. EPA FIFRA toxicology category - IV.

ORAL LD₅₀: Rats = > 5.0 g/kg. EPA FIFRA toxicity category - IV.

INHALATION LC₅₀: Rats - 4-hour inhalation exposure: = 4.84 mg/L. EPA FIFRA toxicity category - IV.

SENSITIZATION: Guinea pig - was not a skin sensitizer in the Buehler Guinea Pig Sensitization Test.

CARCINOGENICITY:

CARCINOGENICITY COMMENTS: Results of rat and mouse lifetime feeding studies did not demonstrate any evidence that fenvalerate (esfenvalerate major isomer) was associated with carcinogenic activity. The results of the rat and mouse chronic feeding studies indicated the NOELs (no observable effect levels) were 12.5 and 15 mg/kg/day, respectively. Based on the results of the investigations, EPA has classed fenvalerate in carcingenicity class E (no evidence of carcinogenicity in either rats or mice). In addition, the chemical is not considered to be a carcinogen by IARC, NTP, OSHA or ACGIH.

TERATOGENICITY: Esfenvalerate is not considered to be a teratogen. Results of the rat and rabbit teratology investigations indicated that the NOEL's for maternal and

developmental toxicity in both species were 2.0 and 20 mg/kg/dy (highest dose tested), respectively.

REPRODUCTIVE TOXIN: Results of the esfenvalerate 2-generation reproduction study demonstrated that the chemical was not associated with any adverse reproduction effects. The NOEL was 3.75 mg/kg/dy.

MUTAGENICITY: Based on the results of both in vivo and in vitro mutagenesis testing, esfenvalerate is not considered to be a mutagen.

GENERAL COMMENTS: Paresthesias: Esfenvalerate is a cyano-pyrethroid insecticide that has been associated with skin paresthesia in cases of extensive overexposure. The paresthesia symptoms are transient and consistent of tingling, burning, stinging sensations at the site of contact. The intensity of the sensory effect depends upon the extent of overexposure, individual skin sensitivity and environmental factors, e.g. hot, cold, pressure, etc. Clinically, the cutaneous sensations may be delayed a few hours, peak around 8-12 hours and remit within a few days. The sensations are usually not accompanied by a visible irritation or rash.

COMMENTS: See Section 16 for definition of EPA FIFRA toxicity categories.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: This material is highly toxic to fish. Do not apply directly to water. Drift from treated area may be hazardous to organisms in adjacent aquatic sites. Do not pour product or rinse water down any drain.

This pesticide is classed as very low to slightly toxic to birds and highly toxic to bees by direct contact. Once foliar residue has dried, the hazard is insignificant.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Do not reuse container. Securely wrap partially filled or empty container in several layers of newspaper and put in trash.

FOR LARGE SPILLS: Material collected that cannot be reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, State or local procedures.

PRODUCT DISPOSAL: The Solaris Group is committed to responsible environmental practices and recommends that all of the product be used up, carefully following all label directions and precautions.

If necessary to dispose of partially filled product containers, then discard in the trash.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

UN/NA NUMBER: NONE

PACKING GROUP: NO

SPECIAL SHIPPING NOTES: The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

313 REPORTABLE INGREDIENTS: No SARA 313 reportable ingredients.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All non FIFRA regulated components are on the US EPA's TSCA Inventory List.

16. OTHER INFORMATION

APPROVAL DATE: 07/29/1999

REVISION SUMMARY New MSDS

MANUFACTURER SUPPLEMENTAL NOTES: EPA FIFRA (Federal Insecticide, Fungicide and Rodenticide Act) Toxicity Categories: The EPA toxicity categories are based on the results of the acute toxicology studies. The toxicology findings are compared to the FIFRA criteria to determine the product label signal word, precautionary and first aid statements. The EPA FIFRA toxicity category summary:

EPA FIFRA Product Label Toxicity Rating
Toxicity Category Signal Word
nup://www.ormo.com/content/products/50lans_msqs/8243Evf14.ft11wi

I DANGER Most toxic and irritating
II WARNING
III CAUTION
IV CAUTION Least toxic and irritating

COMMENTS: For additional information concerning this product, call the SOLARIS Groups Consumer Helpline at 800-225-2883.

MANUFACTURER DISCLAIMER: This Material Safety Data Sheet (MSDS) contains health, safety and environmental information for you and your employees. It does not replace the precautionary language, use directions, or the storage and disposal information found on the product label. Information contained in this MSDS will help you to prepare for emergency response and to meet community right-to-know, emergency response and reporting requirements under SARA Title III and many other laws. Emergency response agencies and health care providers will also find this additional information useful.

Use of this product is regulated by the U.S. Environmental Protection Agency (EPA) through the approved label copy. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

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