P.O. Box 24830 Lexington, KY 40504 Material Safety Data Sheet

GardenTech Sevin Concentrate Bug Killer

This product is used by Homeowners and Professionals Product Code(s): 7100, 7101

SECTION 1 - PRODUCT IDENTIFICATION

Emergency Phone Number: 1-770-787-6127 Poison Control Center: Atlanta: 1-800-282-5846

EPA Reg. Number: 264-334-71004

Chemical Name: Carbaryl; [1 Naphthyl N-Methylcarbamate]

Trade Name: Sevin ®brand Carbaryl Insecticide

SECTION 2 - COMPOSITION

Component	<u>Percentage</u>	ACGIH Exposure Limit	ACGIH Exposure
<u>Limit</u>			
Carbaryl [63-25-2]	22.5%	TLV - 5 mg/m3	PEL - 5 mg/m3
Ethanol [57-55-6]		TLV - 1000 ppm	PEL - 1000 ppm
Propylene glycol		AIHA – 50 ppm	

SECTION 3 - HEALTH HAZARD DATA

EMERGENCY OVERVIEW

An off-white to pale yellow liquid with a phenolic odor:

- * Harmful if swallowed or absorbed through the skin.
- * Extremely toxic to aquatic and estuarine invertebrates.
- * Highly toxic to bees.

ROUTE(S) OF ENTRY: Ingestion and absorption.

ACUTE EYE EFFECTS: Causes redness, irritation, and tearing.

ACUTE SKIN EFFECTS: Harmful if absorbed through the skin. May produce symptoms similar to those from ingestion.

ACUTE INGESTION EFFECTS: Harmful if ingested. This product causes reversible cholinesterase inhibition. Repeated overexposure may cause more severe cholinesterase inhibition with more pronounced signs and symptoms. May lead to rapid onset of nausea, vomiting, diarrhea, abdominal pain, involuntary shaking, excess salivation, pinpoint pupils, blurred vision, profuse sweating, temporary paralysis, respiratory depression, and convulsions.

ACUTE INHALATION EFFECTS: Harmful if inhaled. May produce symptoms similar to those from ingestion.

CHRONIC EFFECTS: This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

SECTION 4 - FIRST AID

IF SWALLOWED: If victim is conscious and alert, give 2-3 glasses of water to drink and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person. Seek immediate medical attention. Do not leave victim unattended. Vomiting may occur spontaneously. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.

IF IN EYES: Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek medical attention.

<u>IF ON SKIN:</u> In case of contact, immediately wash with plenty of soap and water for at least 5 minutes. Seek medical attention if irritation develops or persists. Remove contaminated clothing and shoes. Clean contaminated clothing and shoes before reuse.

IF INHALED: Remove victim from immediate source of exposure and assure that the victim is breathing. If breathing is difficult, administer oxygen, if available. If victim is not breathing, administer CPR (cardio-pulmonary resuscitation). Seek medical attention.

MEDICAL CONDITIONS POSSIBLE AGRAVATED BY EXPOSURE: Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

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SECTION 4 - FIRST AID (continued)

NOTE TO PHYSICIAN: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

This product contains a methyl carbamate insecticide, which is a cholinesterase inhibitor.

Overexposure to this substance may cause toxic signs and symptoms due to stimulation of the cholinergic nervous system. These effects of overexposure are spontaneously and rapidly reversible.

Specific treatment consists of parenteral atropine sulfate. Improve tissue oxygenation as much as possible before administering atropine to minimize the risk of ventricular fibrillation. Mild cases may be given 1 to 2 mg intramuscularly every 10 minutes until full atropinization has been achieved and repeated thereafter whenever symptoms reappear. Severe cases should be given 2 to 4 mg intravenously every 10 minutes until fully atropinized, then intramuscularly every 30 to 60 minutes as needed to maintain the effect for at least 12 hours. Dosages for children should be appropriately reduced. Complete recovery from overexposure is to be expected within 24 hours.

To aid in confirmation of a diagnosis, urine samples should be obtained within 24 hours of exposure and immediately frozen.

Persons regularly exposed in manufacturing and handling this product should have a pre-exposure and periodic red blood cell cholinesterase level checks.

Narcotic and other sedatives should not be used. Further, drugs like 2-PAM (pyridine-2-aldoxime methiodide) are NOT recommended.

SECTION 5 - FIRE & EXPLOSION HAZARDS

FLASH POINT: > 93 C (200 F). Flammability Class: WILL BURN

EXTINGUISHING MEDIA: Recommended (small fires): CO₂ or Dry Chemical. Recommended (large fires): Alcohol Foam, Polymer Foam or Water Spray

SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Keep unnecessary people away, isolate hazard area and deny entry. Evacuate residents who are downwind of fire. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. Persons who may have been exposed to contaminated smoke should be immediately examined by a physician and checked for symptoms of poisoning. The symptoms should not be mistaken for heat exhaustion or smoke inhalation.

UNUSUAL FIRE OR EXPLOSION HAZARDS: Product will burn under fire conditions.

HAZARDOUS DECOMPOSITION MATERIALS: Oxides of nitrogen, oxides of carbon, methyl isocyanate (trace; no adverse effects expected)

SECTION 6 - SPILL AND LEAK PROCEDURES

EVACUATION PROCEDURES AND SAFETY: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

CONTAINMENT OF SPILL: Dike spill using absorbent or impervious materials such as earth, sand or clay. Follow procedure described below under Cleanup and Disposal of Spill. Collect and contain contaminated absorbent and dike material for disposal.

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SECTION 6 - SPILL AND LEAK PROCEDURES (continued)

<u>CLEANUP AND DISPOSAL OF SPILL:</u> Recover material, if possible. Absorb with vermiculite or other inert absorbent. Shovel up into an appropriate closed container (see Section 7: Handling and Storage). Clean up residual material by washing area with water. Decontaminate tools and equipment following cleanup.

ENVIRONMENTAL AND REGULATORY REPORTING: Runoff from fire control or dilution water may cause pollution. Prevent material from entering public sewer system or any waterways. Spills may be reportable to the National Response Center (800-424-8802) and to state and local agencies. If spilled on the ground, the affected area should be removed to a depth of one or two inches and placed in an appropriate container for disposal.

SECTION 7 - STORAGE & HANDLING

MINIMUM/MAXIMUM STORAGE TEMPERATURES: < 38 C (100 F)

HANDLING: Avoid direct or prolonged contact with skin and eyes. Do not ingest.

STORAGE: Store in original container. Store in an area that is cool, dry, away from foodstuffs or animal feed, and out of reach of children and animals

SECTION 8 - SPECIAL PROTECTION INFORMATION

INTRODUCTORY REMARKS: These recommendations provide general guidance for handling this product. Because specific work environments and materials handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13: Disposal Considerations.

Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

ENGINEERING CONTROLS: Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures: general area dilution/exhaust ventilation.

RESPIRATORY PROTECTION: When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.

Under normal conditions, in the absence of other airborne contaminants, the following devices should provide protection from this material up to the conditions specified by the appropriate OSHA, WHMIS or ANSI standard(s): Air-purifying respirator (half-mask/full-face) respirator with cartridges/canister approved for use against pesticides. Under conditions immediately dangerous to life and health, or emergency conditions with unknown concentrations, use a full-face positive pressure air-supplied respirator equipped with an emergency escape air supply unit or use a self-contained breathing apparatus unit.

EYE/FACE PROTECTION: Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use indicated for this material.

Eye contact should be prevented through use of chemical safety glasses with side shields or splash proof goggles. An emergency eye wash must be readily accessible to the work area.

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SECTION 8 - SPECIAL PROTECTION INFORMATION (continued)

SKIN PROTECTION: Skin contact should be prevented through use of suitable protective clothing, gloves and footwear, selected with regard for use conditions and exposure potential. Consideration must be given both to durability as well as permeation resistance.

WORK PRACTICE CONTROLS: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with our or handling this material:

- Do not store, use, nad/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. 1)
- 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- Wash exposed skin promptly to remove accidental splashes of contact with this material
- 4) Do not take clothing/objects contaminated by this material off the work site.

Shower and change into street clothes before leaving the work site.

SECTION 9 - PHYSICAL DATA

Physical Appearance: Off-white to pale yellow liquid

Odor: phenolic Specific Gravity: 1.05 at 20 C (68 F)

Vapor Pressure: 18.1 mmHg at 20 C (68 F) Water Solubility: Miscible

pH: 4 to 5 at 5 wt/wt% Melting Point Range: Not Available Freezing Point Range: -3 C (27 F)

Boiling Point Range: 100 C (212) at 760 mmHg

Vapor Density: 0.62 Molecular Weight: 201.2

SECTION 10 - REACTIVITY DATA

Stability: Stable. Polymerization: Will not occur

Conditions To Avoid: Extreme heat, open flame Materials/Chemicals to Avoid: Strong acids and bases Decomposition Temperature Range: 40 C (104 F)

Thermal Decomposition Products: Oxides of nitrogen, oxides of carbon, methyl isocyanate (trace; no adverse effects expected)

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute Eye Irritation (rabbit): Minimally irritating

Acute Skin Irritation (rabbit): Minimally irritating

Acute Dermal Absorption (rabbit): LD₅₀ > 2,000 mg/kg

Acute Inhalation: No test data found for product.

Acute Ingestion (rat): LD₅₀ = 1,947 mg/kg

Chronic Toxicity: This product does not contain any substances that are considered by OSHA, NTP, IARC or ACGIH to be "probable" or "suspected" human carcinogens.

Carbaryl has been shown to cause tumors in laboratory animals in lifetime feeding studies. Carbaryl, when administered by various routes, at doses toxic to the maternal animals, has been shown to produce developmental toxicity in a number of species. Carbaryl produces no teratogenic effect in the absence of maternal toxicity.

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SECTION 12 - ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: The following data is based on the technical grade active ingredient(s) (TGAI).

Ecotoxicological Information and Interpretation:

 $LC50 \ (mallard \ duck) > 5,000 \ mg/kg/8$ Dietary concentration LC50 (bobwhite quail) > 5,000 mg/kg/8 days Dietary concentration LC50 (rainbow trout) = 1,950 ug/1/96 hr Dietary concentration LC50 (bluegill sunfish) = 6,769 ug/1/96 hr

SECTION 13 - DISPOSAL

<u>WASTE DISPOSAL METHOD:</u> Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

EPA Hazardous Waste - YES

SECTION 14 - TRANSPORTATION

Proper Shipping Name: GardenTech Sevin Insecticide Singles

Technical Name (if applicable):

UN Initial & Number: Not regulated Class: Packing Group: RQ: Not required

Hazard Labels: None required

SECTION 15 - REGULATORY INFORMATION

INVENTORY STATUS

TSCA Y
DSL N
EINECS/ELINCS N
AICS N
MITI N
KECL N

Y = All ingredients are on the inventory.

N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing.

FEDERAL REGULATIONS:

SARA Title III Hazard Classes:

Fire Hazard - NO
Reactive Hazard - NO
Release of Pressure - NO
Acute Health Hazard - YES
Chronic Health Hazard - YES

SARA 313 Chemicals: Carbaryl, CAS# 63-25-2, 22.5%

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SECTION 15 - REGULATORY INFORMATION (continued)

SARA Extremely Hazardous Substances (EHS)/CERCLA Hazardous Substance: Carbaryl, 100 lbs

STATE REGULATIONS:

<u>California Proposition 65:</u> This product does not contain any components that are regulated under California Proposition 65.

SECTION 16 - OTHER INFORMATION

NOTICE FROM TECHPAC,LLC.

The information contained herein is offered only as a guide to the handling of this specific material. Since such information does not relate to use of the material with any other material or in any process, any person using this information must determine for himself its suitability for any particular application. The buyer and user assumes all risk and liability of use, storage and/or handling of this product not in accordance with the terms of the product label.

ABBREVIATIONS KEY:

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

TLV - Threshold Limit Value

PEL - Permissible Exposure Limit

TWA - Time Weighted Average

STEL - Short Term Exposure Limit

NTP - National Toxicology Program

IARC - International Agency for Research on Cancer

ND - Not Determined