

SAFETY DATA SHEET

GARDENTECH® SEVIN® CONCENTRATE BUG KILLER

January 2015

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Trade name GARDENTECH® SEVIN® CONCENTRATE BUG KILLER

EPA Reg. No. 264-334-71004

Relevant identified uses of the substance or mixture and uses advised against

Use Insecticide

Restrictions on use See product label for restrictions.

Information on manufacturer

TechPac, LLC.
1000 Parkwood Circle
Suite 700
Atlanta, GA 30339

Emergency telephone no.

Emergency Telephone Number (24hr/ 7 days) 1-800-420-9347

Product Information Telephone Number 1-866-945-5033

SDS Information or Request 1-866-945-5033

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Carcinogenicity : Category 2

Acute toxicity (Inhalation): Category 3

Acute toxicity (Oral): Category 4



Signal word: Danger

Hazard statements

Toxic if inhaled.

Suspected of causing cancer.

Harmful if swallowed.

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Precautionary statements

Avoid breathing mist and spray.

Use only outdoors or in a well-ventilated area.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor/physician.

Specific treatment (see supplemental first aid instructions on this label).

IF exposed or concerned: Get medical advice/ attention.

IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.

Rinse mouth.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Dispose of contents/container in accordance with local regulation.

Other hazards

This product contains an cholinesterase inhibitor.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Concentration % by weight
Carbaryl	63-25-2	22.50
1,2-Propanediol	57-55-6	3.50
Naphthalene and alkyl naphthalene sulphonic acids formaldehyde condensate, sodium salt	68425-94-5	1.50

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice

When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.

Inhalation

Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.

Skin contact

Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.

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Ingestion Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

Most important symptoms and effects, both acute and delayed

Symptoms Temporary blurred vision due to contraction of the pupils (miosis) following contact with the eyes., Bradycardia, Low blood pressure, Salivation, Bronchial hypersecretion, Vomiting, Diarrhoea, Sweating, Muscular fasciculation, Spasm, Breathing difficulties, Respiratory paralysis, Somnolence, Coma, Respiratory failure, Hypothermia, Convulsions, Nausea

Indication of any immediate medical attention and special treatment needed

Risks This product is a cholinesterase inhibitor carbamate.

Treatment The product inhibits cholinesterase resulting in stimulation of the central nervous system, the parasympathetic nervous system, and the somatic motor nerves.

The following antidote is generally accepted: atropine.

Do not use oximes such as 2-PAM unless organophosphate intoxication is suspected. Watch for pulmonary edema, which may develop in serious cases of poisoning even after 24-48 hours. At first sign of pulmonary edema, the patient should be placed in an oxygen tent and treated symptomatically. Contraindications: derivatives of morphine.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable Water spray, Foam, Carbon dioxide (CO₂), Dry powder

Unsuitable None known.

Special hazards arising from the substance or mixture In the event of fire the following may be released:, Nitrogen oxides (NO_x), Carbon monoxide (CO)

Advice for firefighters

Special protective equipment for fire-fighters Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

Further information Evacuate personnel to safe areas. Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

Flash point > 93.4 °C

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Autoignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Explosivity	not applicable

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

Methods and materials for containment and cleaning up

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.

Additional advice Use personal protective equipment. Do not allow to enter soil, waterways or waste water canal. Inform appropriate authorities immediately if contamination occurs.

Reference to other sections Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

Hygiene measures Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.
Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

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Advice on common storage Keep away from food, drink and animal feedingstuffs.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Carbaryl (Inhalable fraction and vapor.)	63-25-2	0.5 mg/m ³ (TWA)	02 2012	ACGIH
Carbaryl	63-25-2	5 mg/m ³ (REL)	2010	NIOSH
Carbaryl	63-25-2	5 mg/m ³ (PEL)	02 2006	OSHA Z1
Carbaryl	63-25-2	5 mg/m ³ (TWA)	1989	OSHA Z1A
Carbaryl	63-25-2	5 mg/m ³ (TWA)	06 2008	TN OEL
Carbaryl	63-25-2	5ug/m ³ (ST ESL)	07 2011	TX ESL
Carbaryl	63-25-2	0.5ug/m ³ (AN ESL)	07 2011	TX ESL
Carbaryl	63-25-2	5 mg/m ³ (TWA PEL)	08 2010	US CA OEL
Carbaryl	63-25-2	0.5 mg/m ³ (TWA)		OES BCS*
1,2-Propanediol (Vapor.)	57-55-6	1000ug/m ³ (ST ESL)	02 2013	TX ESL
1,2-Propanediol (Vapor.)	57-55-6	50ppb (AN ESL)	02 2013	TX ESL
1,2-Propanediol (Vapor.)	57-55-6	500ppb (ST ESL)	02 2013	TX ESL
1,2-Propanediol (Vapor.)	57-55-6	100ug/m ³ (AN ESL)	02 2013	TX ESL
1,2-Propanediol (Aerosol.)	57-55-6	10 mg/m ³ (TWA)	2010	WEEL
Synthetic amorphous silica	112926-00-8	6 mg/m ³ (REL)	2010	NIOSH
Synthetic amorphous silica	112926-00-8	6 mg/m ³ (TWA)	1989	OSHA Z1A
Synthetic amorphous silica	112926-00-8	6 mg/m ³ (TWA)	06 2008	TN OEL
Synthetic amorphous silica (Particulate.)	112926-00-8	2ug/m ³ (AN ESL)	02 2013	TX ESL
Synthetic amorphous silica (Particulate.)	112926-00-8	27ug/m ³ (ST ESL)	02 2013	TX ESL

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Synthetic amorphous silica	112926-00-8	20millions of particles per cubic foot of air (TWA)	2000	Z3
Synthetic amorphous silica	112926-00-8	0.8 mg/m3 (TWA)	2000	Z3

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

Exposure controls

Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection

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

Under conditions immediately dangerous to life or 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.

Hand protection

Chemical resistant nitrile rubber gloves

Eye protection

Tightly fitting safety goggles

Skin and body protection

Wear long-sleeved shirt and long pants and shoes plus socks.

General protective measures

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water.

Keep and wash PPE separately from other laundry.

Do not allow children or pets to enter the treated area until it has dried.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	white to light beige
Physical State	liquid
Odor	weak
Odour Threshold	no data available
pH	4.0 - 5.0 at 100 % (23 °C)
Vapor Pressure	no data available
Vapor Density (Air = 1)	no data available
Density	1.05 g/cm ³ at 20 °C

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Evapouration rate	no data available
Boiling Point	no data available
Melting / Freezing Point	no data available
Water solubility	miscible
Minimum Ignition Energy	not applicable
Decomposition temperature	no data available
Partition coefficient: n-octanol/water	no data available
Viscosity	500 - 700 cps
Flash point	> 93.4 °C
Autoignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Explosivity	not applicable

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Thermal decomposition	no data available
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No hazardous reactions when stored and handled according to prescribed instructions.
Conditions to avoid	Heat, flames and sparks. Elevated temperatures
Incompatible materials	no data available
Hazardous decomposition products	Nitrogen oxides (NO _x) Carbon oxides Methyl isocyanate (trace; no adverse effects expected)

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes	Ingestion, Inhalation, Skin Absorption, Eye contact
Immediate Effects	
Eye	Causes redness, irritation, tearing. Moderate eye irritation.

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Skin	Harmful if absorbed through skin. May produce symptoms similar to those from ingestion.
Ingestion	Harmful if swallowed. This product causes reversible cholinesterase inhibition without long term effects. Repeated overexposure may cause more severe cholinesterase inhibition with more pronounced 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.
Inhalation	Harmful if inhaled. May produce symptoms similar to those from ingestion.

Information on toxicological effects

Acute oral toxicity	LD50 (male/female combined rat) ca. 1,820 mg/kg
Acute inhalation toxicity	LC50 (male rat) 3.1 mg/l Exposure time: 1 h Determined in the form of liquid aerosol.
Acute dermal toxicity	LD50 (rabbit) > 2,000 mg/kg
Skin irritation	Slight irritation (rabbit)
Eye irritation	Minimally irritating. (rabbit)

Assessment repeated dose toxicity

Carbaryl caused reversible cholinesterase inhibition without long term effects in animal studies.

Assessment Mutagenicity

Carbaryl was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

Assessment Carcinogenicity

Carbaryl caused at high dose levels an increased incidence of tumours in the following organ(s): liver, Thyroid, kidneys, cardio-vascular system. The mechanism that triggers tumours in rodents is not relevant for the low exposures encountered under normal use conditions.

ACGIH

Carbaryl	63-25-2	Group A4
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NTP

None.

IARC

Carbaryl	63-25-2	Overall evaluation: 3
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OSHA

None.

Assessment toxicity to reproduction

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Carbaryl did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

Carbaryl did not cause developmental toxicity in rats and rabbits.

Further information

Only acute toxicity studies have been performed on the formulated product.
The non-acute information pertains to the active ingredient(s).

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish	LC50 (Oncorhynchus mykiss (rainbow trout)) 3.3 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient carbaryl.
Toxicity to aquatic invertebrates	EC50 (Daphnia magna (Water flea)) 0.0164 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient carbaryl.
Toxicity to aquatic plants	EC50 (Pseudokirchneriella subcapitata) 1.75 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient carbaryl.
Biodegradability	Carbaryl: ; rapidly biodegradable
Koc	Carbaryl: Koc: 624
Bioaccumulation	Carbaryl: Bioconcentration factor (BCF) 44; Does not bioaccumulate.
Mobility in soil	Carbaryl: Slightly mobile in soils
Environmental precautions	Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Do not apply when weather conditions favor runoff or drift. Drift or runoff from treated areas may adversely affect non-target plants. Apply this product as specified on the label. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. Inform appropriate authorities immediately if contamination occurs.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

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Product	It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please follow container label instructions and applicable local guidelines. Never place unused product down any indoor or outdoor drain.
Contaminated packaging	Follow advice on product label and/or leaflet. Do not re-use empty containers. Triple rinse containers. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State/Provincial and local authorities, by burning. If burned, stay out of smoke.
RCRA Information	Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

SECTION 14: TRANSPORT INFORMATION

49CFR

UN number	3082
Class	9
Packaging group	III
Marine pollutant	Marine pollutant
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (CARBARYL)
RQ	Reportable Quantity is reached with 444 lb of product.

IMDG

UN number	3082
Class	9
Packaging group	III
Marine pollutant	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CARBARYL SOLUTION)

IATA

UN number	3082
Class	9
Packaging group	III
Environm. Hazardous Mark	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CARBARYL SOLUTION)

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

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SECTION 15: REGULATORY INFORMATION

US Federal Regulations

TSCA list

Carbaryl	63-25-2
1,2-Propanediol	57-55-6
Naphthalene and alkyl naphthalene sulphonic acids formaldehyde condensate, sodium salt	68425-94-5

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

None.

SARA Title III - Section 302 - Notification and Information

None.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

Carbaryl	63-25-2	1.0%
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US States Regulatory Reporting

CA Prop65

This product contains a chemical known to the State of California to cause cancer.

Carbaryl	63-25-2
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This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Carbaryl	63-25-2	Developmental toxin.
Carbaryl	63-25-2	Male reproductive toxin.

US State Right-To-Know Ingredients

Carbaryl	63-25-2	CA, CT, IL, MN, NJ, RI
1,2-Propanediol	57-55-6	MN

Canadian Regulations

Canadian Domestic Substance List

Naphthalene and alkyl naphthalene sulphonic acids formaldehyde condensate, sodium salt	68425-94-5
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Environmental

CERCLA

Carbaryl	63-25-2	100 lbs
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Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

EPA/FIFRA Information:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification

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criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

Signal word: Caution!

Hazard statements: Harmful if swallowed, inhaled or absorbed through the skin.
Avoid contact with skin, eyes and clothing.
Wash thoroughly and put on clean clothing.
Avoid breathing spray mist.
Avoid inhalation of vapour or mist.

SECTION 16: OTHER INFORMATION

NFPA 704 (National Fire Protection Association):

Health - 2 Flammability - 1 Instability - 1 Others - none

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 1 Flammability - 1 Physical Hazard - 0 PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason for Revision: Revised according to the current OSHA Hazard Communication Standard (29CFR1910.1200)

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