

**Material Safety Data Sheet****SEVIN® BRAND XLR PLUS CARBARYL INSECTICIDE**

MSDS Number: 102000001927

MSDS Version 2.0

Revision Date: 07/20/2005

**SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION**

**Product Name** SEVIN® BRAND XLR PLUS CARBARYL INSECTICIDE  
**MSDS Number** 102000001927  
**EPA Registration No.** 264-333

Bayer CropScience  
2 T.W. Alexander Drive  
Research Triangle PK, NC 27709  
USA

For MEDICAL, TRANSPORTATION or other EMERGENCY call 1-800-334-7577 (24 hours/day)  
For Product Information call 1-866-99BAYER (1-866-992-2937)

**SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS**

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Carbaryl	63-25-2	44.10

**SECTION 3. HAZARDS IDENTIFICATION**

*NOTE: Please refer to Section 11 for detailed toxicological information.*

**Emergency Overview**

Caution! Harmful if swallowed, inhaled or absorbed through the skin. Harmful if gets in eyes. Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing.

**Physical State** suspension opaque

**Odor** slight, specific odour

**Appearance** white to beige

**Routes of Exposure** Ingestion, Inhalation, Eye contact, Skin Absorption

**Immediate Effects****Eye**

Do not get in eyes. May causes redness, irritation, tearing.

**Skin**

Harmful if absorbed through skin. May produce symptoms similar to those from ingestion.

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<b>Ingestion</b>	Harmful if swallowed. 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.
<b>Inhalation</b>	Harmful if inhaled. Do not breathe vapours or spray mist. May produce symptoms similar to those from ingestion.
<b>Medical Conditions Aggravated by Exposure</b>	Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

**SECTION 4. FIRST AID MEASURES**

<b>General</b>	Have the product container or label with you when calling a poison control center or doctor or going for treatment. If poisoning is suspected in animals, contact a veterinarian.
<b>Eye</b>	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
<b>Skin</b>	Take off all contaminated clothing immediately. Rinse immediately with plenty of water for at least 15 minutes. Call a poison control center or doctor for treatment advice.
<b>Ingestion</b>	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. 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.
<b>Inhalation</b>	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 poison control center or doctor for further treatment advice.
<b>Notes to Physician Signs and Symptoms</b>	symptoms of cholinesterase inhibition (gastrointestinal disturbances, dyspnoea, narrowing of the respiratory passages, bradycardia, miosis, clonic spasms). Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
<b>Hazards</b>	Must NOT be confused with organophosphorus compounds! This product contains a cholinesterase inhibitor carbamate.
<b>Treatment</b>	In case of ingestion, the stomach should be emptied by gastric lavage under qualified medical supervision. Caution should be maintained to prevent overatropinization. Good oxygenation is essential for the tolerance of atropine. Mild cases may be given 1 to 2 mg intramuscularly every 10 minutes until full

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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 over exposure is to be expected within 24 hours. Narcotics and other sedative should not be used. Carbaryl is an N-Methylcarbamate that inhibits cholinesterase. Drugs like 2-Pam (pyridine-2-aldoxime methiodide) are not recommended. To aid in confirmation of a diagnosis, urine samples should be obtained within 24 hours of exposure and immediately frozen. Analysis will be arranged by Bayer.

**SECTION 5. FIRE FIGHTING MEASURES**

<b>Flash Point</b>	not applicable
<b>Fire and Explosion Hazards</b>	The product itself does not burn. In the event of fire the following can be released: carbon monoxide (CO) nitrogen oxides (NOx)
<b>Suitable Extinguishing Media</b>	water spray, foam, carbon dioxide (CO <sub>2</sub> ), dry powder
<b>Fire Fighting Instructions</b>	Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  Use breathing apparatus.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

<b>Personal Precautions</b>	Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.
<b>Methods for Cleaning Up</b>	Recover the product by pumping, suction or absorption using a dry and inert absorbent clay. Pick up and fill the product into a tightly closed container. When picked up, treat material as prescribed in Ch. 13. "Disposal considerations".
<b>Additional Advice</b>	Use personal protective equipment. Do not allow material to enter streams, sewers, or other waterways.

**SECTION 7. HANDLING AND STORAGE**

<b>Handling Procedures</b>	Smoking, eating and drinking should be prohibited in the application area.
<b>Storing Procedures</b>	Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, 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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#### Work/Hygienic Procedures

Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

#### Min/Max Storage Temperatures

Do not transport or store above 38 °C / 100 °F

## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### General Protection

Cholinesterase activity of the worker should be supervised.

Follow all label instructions. Educate and train employees in safe use of the product.

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.

#### Engineering Controls

Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

#### Eye/Face Protection

Safety glasses with side-shields

#### Hand Protection

Chemical-resistant gloves (barrier laminate, butyl rubber, nitrile rubber or Viton)

#### Body Protection

Wear long-sleeved shirt and long pants and shoes plus socks.  
Chemical resistant headgear for overhead exposure

#### Respiratory Protection

Breathing apparatus in the event of aerosol or mist formation.

#### Exposure Limits

This product contains material which are Trade Secret and may have Occupational Exposure Limits. If more information is required, call the product information number listed in Section 1.

Carbaryl	63-25-2	ACGIH	TWA	5 mg/m3
		NIOSH	REL	5 mg/m3
		OSHA Z1	PEL	5 mg/m3
		OSHA Z1A	TWA	5 mg/m3
		US CA OEL	TWA PEL	5 mg/m3

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Appearance

white to beige

#### Physical State

suspension opaque

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<b>Odor</b>	slight, specific odour
<b>pH</b>	5.2 - 6.1 Suspension in water
<b>Density</b>	1.09 g/cm <sup>3</sup> at 20 °C
<b>Boiling Point</b>	103 °C / 217 °F
<b>Melting/Freezing Point</b>	-4 °C / 25 °F
<b>Water Solubility</b>	completely miscible
<b>Decomposition Temperature</b>	175 - 190 °C Exothermic decomposition.

**SECTION 10. STABILITY AND REACTIVITY**

<b>Chemical Stability</b>	Stable under recommended storage conditions.
<b>Conditions to Avoid</b>	Sustained temperatures above 100°F.
<b>Incompatibility</b>	acids bases
<b>Hazardous Reactions</b>	No hazardous reactions when stored and handled according to prescribed instructions. Stable under normal conditions.

**SECTION 11. TOXICOLOGICAL INFORMATION**

The non-acute information pertains to the technical-grade active ingredient, carbaryl.

<b>Acute Oral Toxicity</b>	rat: LD50: 699 mg/kg
<b>Acute Dermal Toxicity</b>	rabbit: LD50: > 4,000 mg/kg
<b>Acute Inhalation Toxicity</b>	rat: LC50: > 3.8 mg/l Exposure time: 4 h (actual)  rat: LC50: 15.2 mg/l Exposure time: 1 h Extrapolated from the 4 hr LC50. (actual)
<b>Skin Irritation</b>	rabbit: non-irritant



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<b>Eye Irritation</b>	rabbit: slight irritation
<b>Sensitization</b>	guinea pig: Non-sensitizing
<b>Chronic Toxicity</b>	Reversible cholinesterase inhibition occurred in chronic toxicity studies in rats and dogs. The principal organs affected in rats from long-term exposure to high-doses of carbaryl included the urinary bladder, thyroid, kidneys and liver.

#### Assessment Carcinogenicity

Carbaryl has been shown to cause tumors in laboratory animals in lifetime feeding studies.

##### ACGIH

Carbaryl

63-25-2

Group A4

##### NTP

None.

##### IARC

Carbaryl

63-25-2

Overall evaluation: 3

##### OSHA

None.

<b>Reproductive &amp; Developmental Toxicity</b>	REPRODUCTION: Carbaryl was not a reproductive toxicant in a two-generation study in rats.
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DEVELOPMENTAL TOXICITY: Carbaryl was not a primary developmental toxicant in rats and rabbits. Developmental effects were observed in both species but were considered secondary to maternal toxicity.

<b>Neurotoxicity</b>	Carbaryl caused transient neurobehavioral effects (e.g., tremors) related to cholinergic toxicity without correlating neuropathological changes in acute and subchronic neurotoxicity studies in rats. Carbaryl did not cause developmental neurotoxic effects in offspring in a one-generation developmental neurotoxicity study in rats.
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<b>Mutagenicity</b>	A battery of in vitro and in vivo mutagenicity studies have been conducted on carbaryl. Collectively, these studies indicate that carbaryl poses only a slight mutagenic risk.
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## SECTION 12. ECOLOGICAL INFORMATION

<b>Environmental Precautions</b>	Extremely toxic to aquatic and estuarine invertebrates. For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below mean high water mark. Do not apply when weather conditions favor runoff or drift. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Apply this product only as specified on the label.
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This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply it or allow it to drift to crops or weeds on which bees are actively foraging. Applications should be timed to coincide with periods of minimum bee activity, usually between late evening and early morning.

**SECTION 13. DISPOSAL CONSIDERATIONS****General Disposal Guidance**

Open dumping is prohibited. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Dispose in accordance with all local, state/provincial and federal regulations.

**Container Disposal**

Do not re-use empty containers. Triple rinse containers. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incineration, or if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

**RCRA Classification:**

The RCRA Classifications may be on the individual component(s) and not necessarily on the product as a whole.

63-25-2

Carbaryl

US. EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261): U279

63-25-2

Carbaryl

US. EPA Resource Conservation and Recovery Act (RCRA) U List of Hazardous Wastes (40 CFR 261.33(f) and 40 CFR 302 [CERCLA]): U279

**SECTION 14. TRANSPORT INFORMATION****TDG CLASSIFICATION:**

Not regulated for Road and Rail\*\*

**DOT CLASSIFICATION:**

Not regulated for surface transportation\*

\* add RQ(Carbaryl) to Proper Shipping Name when package contains a RQ =100 LBS of Carbaryl

\* Environmentally Hazardous Substances, Liquid, N.O.S. ( Carbaryl) // 9 // UN3082 // PG III // RQ(Carbaryl)

**TDG & Bulk Package:**

\*\*Add " Marine Pollutant "

**FREIGHT CLASSIFICATION:**

Insecticides or Fungicides, N.O.I., other than poison

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Carbaryl 63-25-2

**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%

**US States Regulatory Reporting****CA Prop65**

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

**US State Right-To-Know Ingredients**

Carbaryl 63-25-2 CA, CT, IL, MA, MN, NJ, PA, RI

**Canadian Regulations****Canadian Domestic Substance List**

None.

**Environmental****CERCLA**

Carbaryl 63-25-2 100 lbs

**Clean Water Section 307 Priority Pollutants**

None.

**Safe Drinking Water Act Maximum Contaminant Levels**

None.

**International Regulations****European Inventory of Existing Commercial Substances (EINECS)**

Carbaryl 63-25-2

**SECTION 16. OTHER INFORMATION**

NFPA 704 (National Fire Protection Association):

Health - 1 Flammability - 0 Reactivity - 1 Others - none

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

Reason to Revise: Re-numbered due to system update; Updated sections as needed.





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