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

Product identifier
Trade name SEVIN® SL CARBARYL INSECTICIDE
Product code (UVP) 05927226
SDS Number 102000004253
EPA Registration No. 432-1227

Relevant identified uses of the substance or mixture and uses advised against
Use Insecticide
Restrictions on use See product label for restrictions.
Information on supplier
Supplier Bayer Environmental Science
A division of Bayer CropScience LP
5000 Centregreen Way, Suite 400
Cary, NC 27513
USA
Responsible Department Email: SDSINFO.BCS-NA@bayer.com
Emergency telephone no. Emergency Telephone Number (24hr/7 days) 1-800-334-7577
Product Information Telephone Number 1-800-331-2867

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200
Acute toxicity(Oral): Category 4
Carcinogenicity: Category 2

Labelling in accordance with regulation HCS 29CFR §1910.1200

Signal word: Warning
Hazard statements Harmful if swallowed.
Suspected of causing cancer.

**Precautionary statements**
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
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.
IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.
Rinse mouth.
IF exposed or concerned: Get medical advice/ attention.
Store locked up.
Dispose of contents/container in accordance with local regulation.

**Hazards Not Otherwise Classified (HNOC)**
This product contains an cholinesterase inhibitor.
No physical hazards not otherwise classified.

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**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

<table>
<thead>
<tr>
<th>Hazardous Component Name</th>
<th>CAS-No.</th>
<th>Concentration % by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbaryl</td>
<td>63-25-2</td>
<td>43.0</td>
</tr>
<tr>
<td>Alkynaphthalenesulfonic acid, polymer with formaldehyde, sodium salt</td>
<td>68425-94-5</td>
<td>1.1</td>
</tr>
</tbody>
</table>

---

**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**
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 physician or poison control center immediately.

**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
- Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

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

Unsuitable
- High volume water jet

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

Advice for firefighters

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

Further information
- Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses.

Flash point
- > 100 °C / > 212 °F

Auto-ignition temperature
- No data available

Lower explosion limit
- 2.6 % (V)

Upper explosion limit
- 19 % (V)

Explosivity
- No data available
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. If the product is accidentally spilled, do not allow to enter soil, waterways or waste water canal.

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
Use only in area provided with appropriate exhaust ventilation. Handle and open container in a manner as to prevent spillage.

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. 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. Protect from freezing.

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Update</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbaryl</td>
<td>63-25-2</td>
<td>5 mg/m3 (TWA)</td>
<td>1989</td>
<td>OSHA Z1A</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET

SEVIN® SL CARBARYL INSECTICIDE

Version 4.0 / USA
102000004253

Revision Date: 09/23/2021
Print Date: 09/24/2021

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.

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

Eye protection
Safety glasses with side-shields

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. Cholinesterase activity of the worker should be supervised.
Eye wash facility and safety shower should be available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Form
suspension

Colour
white to beige

Odour
mild

Odour Threshold
No data available

pH
4.0 - 5.0 (100 %) (23 °C)
Freezing temperature  
-3 °C / 26.6 °F

Boiling point/boiling range  
98.8 °C / 209.84 °F

Flash point  
> 100 °C / > 212 °F

Flammability  
No data available

Auto-Ignition temperature  
No data available

Thermal decomposition  
175 - 190 °C
Exothermic decomposition.

Ignition temperature  
590 °C / 1094 °F

Minimum ignition energy  
No data available

Self-accelerating decomposition temperature (SADT)  
No data available

Upper explosion limit  
19 %(V)

Lower explosion limit  
2.6 %(V)

Vapour pressure  
23.7 hPa (20 °C)

Evaporation rate  
No data available

Relative vapour density  
No data available

Relative density  
No data available

Density  
1.10 g/cm³ (20 °C)

Water solubility  
miscible

Partition coefficient: n-octanol/water  
No data available

Viscosity, dynamic  
500 - 700 mPa.s (20 °C)

Viscosity, kinematic  
No data available

Oxidizing properties  
No data available

Explosivity  
No data available

Other information  
Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY

Reactivity  
Stable under normal conditions.

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
Extremes of temperature and direct sunlight.

Incompatible materials
Strong acids, Bases

Hazardous decomposition products
No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes
Ingestion, Inhalation, Skin contact, Eye contact

Immediate Effects
Eye
May cause redness, tearing.

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 (Rat) 699 mg/kg

Acute inhalation toxicity
LC50 (male/female combined Rat) >= 3.84 mg/l
Exposure time: 4 h
Determined in the form of liquid aerosol.
Highest attainable concentration.

Acute dermal toxicity
LD50 (male/female combined Rabbit) > 4,000 mg/kg

Skin corrosion/irritation
Slight irritant effect - does not require labelling. (Rabbit)

Serious eye damage/eye irritation
Slight irritant effect - does not require labelling. (Rabbit)

Respiratory or skin sensitisation
Skin: Non-sensitizing. (Guinea pig)

Assessment STOT Specific target organ toxicity – single exposure
Carbaryl: Based on available data, the classification criteria are not met.

Assessment STOT Specific target organ toxicity – repeated exposure
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
Assessment carcinogenicity
Carbaryl caused at high dose levels an increased incidence of tumours in the following organ(s): Liver, Thyroid, Kidney, 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

NTP
None.

IARC
Carbaryl 63-25-2 Overall evaluation: 3

OSHA
None.

Assessment toxicity to reproduction
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.

Aspiration hazard
Based on available data, the classification criteria are not met.

Further information
Acute toxicity studies have been bridged from a similar formulation(s). The non-acute information pertains to the active ingredient(s).

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish
LC50 (Oncorhynchus mykiss (rainbow trout)) 1.4 mg/l
Exposure time: 96 h

Toxicity to aquatic invertebrates
EC50 (Daphnia magna (Water flea)) 0.00067 mg/l
Exposure time: 48 h
EC50 (Mysisidopsis bahia (mysid shrimp)) 0.0088 mg/l
Exposure time: 96 h

Toxicity to aquatic plants
(Raphidocelis subcapitata (freshwater green alga)) 1.8 mg/l
Exposure time: 96 h
Test conducted with a similar formulation.
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
Results of PBT and vPvB assessment
PBT and vPvB assessment Carbaryl: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).
Additional ecological information No other effects to be mentioned.
Environmental precautions Do not allow to get into surface water, drains and ground water.
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.
Apply this product as specified on the label.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods
Product Dispose in accordance with all local, state/provincial and federal regulations.
Contaminated packaging Consult state and local regulations regarding the proper disposal of container.
Follow advice on product label and/or leaflet.
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 232 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.

Freight Classification: INSECTICIDES OR FUNGICIDES, N.O.I., OTHER THAN POISON

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 432-1227
US Federal Regulations TSCA list
Water 7732-18-5
Carbaryl 63-25-2
1,2-Propanediol 57-55-6
Alkynaphthalenesulfonic acid, polymer with formaldehyde, sodium salt 68425-94-5

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)
No export notification needs to be made.

SARA Title III - Section 302 - Notification and Information
Not applicable.
SARA Title III - Section 313 - Toxic Chemical Release Reporting
Yes

US States Regulatory Reporting
CA Prop65
This product does not contain any substances known to the State of California to cause cancer.

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.
SAFETY DATA SHEET

SEVIN® SL CARBARYL INSECTICIDE

Carbaryl 63-25-2 Developmental toxin.
Carbaryl 63-25-2 Carcinogenic.
Carbaryl 63-25-2 Male reproductive toxin.
Carbaryl 63-25-2 Female reproductive toxin.
Crystalline quartz (respirable) 14808-60-7 Carcinogenic.

US State Right-To-Know Ingredients
Carbaryl 63-25-2 CA, CT, IL, MN, NJ, RI
1,2-Propanediol 57-55-6 MN, RI
Synthetic amorphous silica 112926-00-8 CA, CT, MN

Environmental
CERCLA
Yes
Carbaryl 63-25-2

Clean Water Section 307(a)(1)
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 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.
Harmful if gets in eyes.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms
49CFR Code of Federal Regulations, Title 49
ACGIH US. ACGIH Threshold Limit Values
ATE Acute toxicity estimate
CAS-Nr. Chemical Abstracts Service number
CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
EINECS European inventory of existing commercial substances
ELINCIS European list of notified chemical substances
IARC International Agency for Research on Cancer
IATA International Air Transport Association
IMDG International Maritime Dangerous Goods
N.O.S. Not otherwise specified
NTP US. National Toxicology Program (NTP) Report on Carcinogens
SAFETY DATA SHEET

SEVIN® SL CARBARYL INSECTICIDE
Version 4.0 / USA

OECD Organization for Economic Co-operation and Development
TDG Transportation of Dangerous Goods
TWA Time weighted average
UN United Nations
WHO World health organisation

NFPA 704 (National Fire Protection Association):
Health - 2  Flammability - 1  Instability - 1  Others - none

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

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

Reason for Revision: The following sections have been revised: Section 3: Composition / Information on Ingredients. Section 8: Exposure Controls / Personal Protection. Section 12. Ecological information. Reviewed and updated for general editorial purposes.

Revision Date: 09/23/2021

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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