

SAFETY DATA SHEET



SEVIN® BRAND 85 S CARBARYL INSECTICIDE

Version 1.0 / USA
102000026142

1/11
Revision Date: 10/09/2017
Print Date: 10/10/2017

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

Product identifier

Trade name SEVIN® BRAND 85 S CARBARYL INSECTICIDE

Product code (UVP) 80221606

SDS Number 102000026142

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
2 T.W. Alexander Drive
Research Triangle PK, NC 27709
United States

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

Carcinogenicity: Category 2
Acute toxicity(Oral): Category 3
Combustible dust

Labelling in accordance with regulation HCS 29CFR §1910.1200



Signal word: Danger

Hazard statements

Suspected of causing cancer.
Toxic if swallowed.
May form combustible dust concentrations in air.
Conduct Dust Hazard Assessment (DHA).

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Precautionary statements

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 exposed or concerned: Get medical advice/ attention.
IF SWALLOWED: Immediately call a POISON CENTER/doctor/ physician.
Specific treatment (see supplemental first aid instructions on this label).
Rinse mouth.
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.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Concentration % by weight
Carbaryl	63-25-2	85.0

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.
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

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Symptoms	Temporary blurred vision due to contraction of the pupils (miosis) following contact with the eyes.
Indication of any immediate medical attention and special treatment needed	
Risks	This product is a cholinesterase inhibitor carbamate.
Treatment	<p>The product inhibits cholinesterase resulting in stimulation of the central nervous system, the parasympathetic nervous system, and the somatic motor nerves.</p> <p>The following antidote is generally accepted: atropine.</p> <p>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.</p>

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable High volume water jet

Special hazards arising from the substance or mixture Dangerous gases are evolved in the event of a fire.

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. Do not allow run-off from fire fighting to enter drains or water courses.

Flash point Not applicable

Auto-ignition temperature No data available

Lower explosion limit Not applicable

Upper explosion limit Not applicable

Explosivity No data available

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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. Avoid dust formation.

Methods and materials for containment and cleaning up

Methods for cleaning up Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal. 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 Handle and open container in a manner as to prevent spillage. Use only in area provided with appropriate exhaust ventilation. Avoid dust formation.

Advice on protection against fire and explosion Dust may form explosive mixture in air.

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.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Carbaryl	63-25-2	5 mg/m ³ (TWA)	1989	OSHA Z1A

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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)	06 2008	TN OEL
Carbaryl	63-25-2	5 mg/m ³ (TWA PEL)	08 2010	US CA OEL
Carbaryl	63-25-2	0.5 mg/m ³ (TLV)		OES BCS*

*OES BCS: Internal Bayer AG, Crop Science Division "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.

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.
Chemical resistant headgear for overhead exposure

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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	white to light beige
Physical State	powder fine
Odor	characteristic
Odour Threshold	No data available
pH	5.5 - 7.2
Vapor Pressure	Not applicable
Vapor Density (Air = 1)	No data available
Bulk density	0.30 - 0.42 g/ml (bulk density tapped)

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	19.0 - 26.0 lb/ft ³ (bulk density tapped)
Evaporation rate	Not applicable
Boiling Point	Not applicable
Melting / Freezing Point	Not applicable
Water solubility	dispersible
Minimum Ignition Energy	> 3 - < 5 mJ
Decomposition temperature	175 - 190 °C Exothermic decomposition.
Partition coefficient: n-octanol/water	No data available
Viscosity	Not applicable
Flash point	Not applicable
Auto-ignition temperature	No data available
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Explosivity	No data available

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Thermal decomposition	175 - 190 °C Exothermic decomposition.
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	No data available
Hazardous decomposition products	No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes	Ingestion, Eye contact, Skin Absorption, Inhalation
Immediate Effects	

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Eye	May cause redness, irritation, tearing.
Skin	Harmful if absorbed through skin. May produce symptoms similar to those from ingestion.
Ingestion	May be fatal 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.

Information on toxicological effects

Acute oral toxicity	LD50 (Rat) 212 mg/kg
Acute inhalation toxicity	LC50 (Rat) > 5 mg/l Exposure time: 4 h
Acute dermal toxicity	LD50 (Rabbit) > 2,000 mg/kg
Skin irritation	Slight irritant effect - does not require labelling. (Rabbit)
Eye irritation	Slight irritant effect - does not require labelling. (Rabbit)
Sensitisation	Non-sensitizing. (Guinea pig)

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 and in vivo tests.

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
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NTP

None.

IARC

Carbaryl	63-25-2	Overall evaluation: 3
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OSHA

None.

Assessment toxicity to reproduction

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

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Assessment developmental toxicity

Carbaryl did not cause developmental toxicity in rats and rabbits.

Further information

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 (Raphidocelis subcapitata (freshwater green alga)) 1.75 mg/l 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
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. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product Pesticide, spray mixture or rinse water that cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility.
Dispose in accordance with all local, state/provincial and federal regulations.

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	Do not contaminate water, food, or feed by disposal.
Contaminated packaging	Do not re-use empty containers. Completely empty container into application equipment, then dispose of empty container in a sanitary landfill, by incineration or by other procedures approved by state/provincial and local authorities. If burned, stay out of smoke. 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	2757
Class	6.1
Packaging group	III
Marine pollutant	Marine pollutant
Proper shipping name	CARBAMATE PESTICIDES, SOLID, TOXIC (CARBARYL)
RQ	Reportable Quantity is reached with 117 lb of product.

IMDG

UN number	2757
Class	6.1
Packaging group	III
Marine pollutant	YES
Proper shipping name	CARBAMATE PESTICIDE, SOLID, TOXIC (CARBARYL MIXTURE)

IATA

UN number	2757
Class	6.1
Packaging group	III
Environm. Hazardous Mark	NO
Proper shipping name	CARBAMATE PESTICIDE, SOLID, TOXIC (CARBARYL MIXTURE)

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

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SECTION 15: REGULATORY INFORMATION

US Federal Regulations

TSCA list

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

Carbaryl 63-25-2

This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Carbaryl 63-25-2 Male reproductive toxin.

Carbaryl 63-25-2 Developmental toxin.

US State Right-To-Know Ingredients

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

Canadian Regulations

Canadian Domestic Substance List

None.

Environmental

CERCLA

Carbaryl 63-25-2

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

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
ELINCS	European list of notified chemical substances
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods

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N.O.S.	Not otherwise specified
NTP	US. National Toxicology Program (NTP) Report on Carcinogens
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

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

Health - 2 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)

Revision Date: 10/09/2017

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