

## Safety Data Sheet

### 1 IDENTIFICATION

**Product Name:**

**Sevin® 4F**  
brand Carbaryl Insecticide

**EPA Reg. No.:**  
**Chemical Family:**

61842-38  
 Carbamate

**Manufacturer/Supplier:**




Tessenderlo Kerley Inc.  
 2255 N. 44<sup>th</sup> Street, Suite 300  
 Phoenix, Arizona 85008-3279  
 Information: (602) 889-8300

**For 24-Hour Emergency Assistance (Spill, Leak, Fire, or Exposure), Call CHEMTREC®:**

(800) 424-9300 (CHEMTREC)  
 (866) 374-1975 (Tessenderlo Kerley)

### 2 HAZARD(S) IDENTIFICATION

*Classification of the substance or mixture*

Pictogram	Hazard Statements	Precautionary Statements
	Suspected of causing cancer. May damage fertility or the unborn child.	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. If exposed or concerned: Get medical advice. Store locked up. Dispose of contents in accordance with local and State regulations.
	Harmful if swallowed.	Wash thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Call a POISON CENTER if you feel unwell. Rinse mouth.
	Very toxic to aquatic life.	Avoid release to the environment. Collect spillage.

**Signal word:** Warning

**Hazard-determining components of labeling:**

carbaryl (ISO)

**NFPA Hazard Ratings**



Health = 2  
 Fire = 1  
 Reactivity = 1

**HMIS Ratings**



Health = \*2  
 Fire = 1  
 Reactivity = 1

### 3 COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical Characterization:** Mixture

**Description:** Mixture of the substance(s) listed below with nonhazardous additions.

Active Ingredient:	Component	CAS No.	% by Weight
	Carbaryl (1-naphthyl methyl carbamate)	63-25-2	43
	Propylene glycol (1,2-Propanediol)	57-55-6	5

### 4 FIRST AID MEASURES

**Description of first aid measures**

**General information:**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergencies involving this product, call toll free 1-866-374-1975. See Label for Additional Precautions and Directions for Use.

**IF SWALLOWED:** 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 told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**IF INHALED:** Move person 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.

**IF IN EYES:** 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.

**NOTE TO PHYSICIAN:** Carbaryl contains an N-methyl carbamate that inhibits cholinesterase. Drugs like 2-Pam (pyridine-2-aldoxime methiodide) are not recommended. To aid in the confirmation of diagnosis, urine samples should be obtained within 24 hours of exposure and immediately frozen. Analysis will be arranged by Tessenderlo Kerley, Inc. Consultation on therapy can be obtained at all hours by calling the appropriate emergency number 1-866-374-1975 (U.S.A.)

### 5 FIRE FIGHTING MEASURES

**Extinguishing media**

**Suitable extinguishing agents:**

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray.

**Special hazards arising from the substance or mixture**

Keep containers/storage vessels in fire area cooled with water spray

In case of fire, the following can be released:

Nitrogen oxides (NO<sub>x</sub>)

Carbon dioxide

**Advice for firefighters**

**Protective equipment:**

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face piece operated in positive pressure mode.

## 6 ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Not required.

Uncontrolled release should be responded to by trained personnel using pre-planned procedures. Evacuate area. Evacuate personnel to a safe area.

Keep people at a distance and stay upwind.

### Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

### Methods and material for containment and cleaning up:

Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

## 7 HANDLING and STORAGE

### Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Avoid prolonged or repeated exposure.

Personnel must refer to the Product Label and Directions For Use attached to the product for agricultural use requirements in accordance with the EPA Worker Protection Standard.

### Information about protection against explosions and fires:

Keep protective respiratory device available.

### Conditions for safe storage, including any incompatibilities

Store unused SEVIN® brand 4F Carbaryl Insecticide in original container only, in cool, dry area out of reach of children and animals. Do not store in areas where temperatures frequently exceed 100° F. If container is damaged, before cleaning up, put on Personal Protective Equipment.

## 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Components with occupational exposure limits:

	CAS No.	ACGIH TWA/STEL	NIOSH REL	OSHA PEL/TWA
Carbaryl	63-25-2	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>
Ethanol	64-17-5	1,000 ppm	1,000 ppm	1,000 ppm

### Additional information:

Personnel who handle this product in its end-use application should use this product only in accordance with its pesticide labeling and with the "Worker Protection Standard", 40 CFR 170.

### Exposure controls

#### Personal protective equipment:

#### General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

#### Breathing equipment:

A NIOSH-approved dust/mist filtering respirator with NIOSH/MSHA approval number prefix TC-21C or a NIOSH-approved respirator with any N, R, P or HE filter.

## 8 EXPOSURE CONTROLS/PERSONAL PROTECTION *(continued)*

### Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product.

### Material of gloves

Butyl rubber, BR  
Natural rubber, NR  
Nitrile rubber, NBR  
Neoprene gloves

### Penetration time of glove material

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

### Eye protection:

Tightly sealed goggles  
Face protection

### Body protection:

Wear long-sleeved shirt and long pants, waterproof shoes and socks. Wash contaminated clothing before reuse.

## 9 PHYSICAL and CHEMICAL PROPERTIES

<b>Appearance</b>	White to beige liquid suspension
<b>Odor</b>	Mild
<b>pH @ 20°C (68°F)</b>	4.0 – 5.0
<b>Melting/Freezing Point</b>	-3°C (27°F)
<b>Boiling Point</b>	185 °C (365 °F)
<b>Flash Point</b>	> 100 °C (> 212 °F)
<b>Evaporation Rate</b>	Not determined
<b>Upper/Lower Flammability or Explosive Limits</b>	Not determined
<b>Vapor Pressure @ 20 °C (68 °F)</b>	23.7 hPa (18 hPa mm Hg)
<b>Vapor Density @ 20 °C (68 °F)</b>	0.62 g/cm <sup>3</sup> (5.174 lbs/gal)
<b>Relative Density</b>	Not determined
<b>Bulk Density</b>	1.1 g/cm <sup>3</sup> (9.18 lbs/gal)
<b>Solubility (in Water)</b>	Fully miscible
<b>Partition Coefficient: n-octanol/water</b>	Not determined
<b>Auto-ignition temperature</b>	Product is not self-igniting
<b>Decomposition temperature</b>	175 – 190°C (exothermic decomposition)
<b>Viscosity</b>	Not determined

## 10 STABILITY and REACTIVITY

<b>Reactivity</b>	N/A
<b>Chemical stability</b>	This is a stable material under normal temperature and storage conditions.
<b>Possibility of hazardous reactions</b>	Will not occur
<b>Conditions to avoid</b>	Heat, flame and ignition sources.
<b>Incompatible materials</b>	Strong acids; bases
<b>Hazardous decomposition products</b>	Carbon oxides, Nitrogen oxides, Methyl iso-cyanate (trace: no adverse effects expected)

## 11 TOXICOLOGICAL INFORMATION

### Acute toxicity:

#### LD/LC<sub>50</sub> values relevant for classification:

Oral	Rat LD <sub>50</sub>	699 mg/kg
Dermal	Rabbit LD <sub>50</sub> :	>4,000
Inhalation	Rat LC <sub>50</sub> :	3.84 mg/l (4 hr exposure)

### Primary irritant effect:

#### on the skin

Mild irritant effect

#### on the eye

Mild irritant effect

### Reproductive and

### Developmental Toxicity

Carbaryl was not a reproductive toxicant in a 2-generation study in rats. 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

### Neurotoxicity

Carbaryl caused transient neurobehavioral effects (e.g., tremors) related to cholinergic toxicity without correlating neuropathological changes in acute and sub chronic neurotoxicity studies in rats. Carbaryl did not cause developmental neurotoxic effects in offspring in a 1-generation study in rats.

### Mutagenicity

Carbaryl poses only a slight mutagenic risk based on the overall weight of evidence in a battery of in-vitro and vivo tests.

### Additional toxicological information:

Reversible cholinesterase inhibition occurred in chronic toxicity studies in rats and dogs. The principle organs affected in rats from long term exposure to high doses of Carbaryl include the urinary bladder, thyroid, kidneys and liver.

Carbaryl has been shown to cause tumor in lab animals in lifetime feeding studies

### Carcinogenic categories

IARC (International Agency for Research on Cancer)

Carbaryl; overall evaluation: 3

NTP (National Toxicology Program)

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

## 12 ECOLOGICAL INFORMATION

### AQUATIC TOXICITY

96 hour LC <sub>50</sub>	Rainbow trout:	1.4 mg/l
48 hour EC <sub>50</sub>	Daphnia magna:	0.00067 mg/l

This information is based on the active ingredient:

### AVIAN TOXICOLOGY

Acute Oral LC <sub>50</sub>	Bobwhite quail	>5,000 mg/kg
Oral LC <sub>50</sub>	Mallard duck	>5,000

### Additional ecological information:

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Dangerous to drinking water if even extremely small quantities leak into the ground.

Poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

## 13 DISPOSAL CONSIDERATIONS

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Non-refillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Offer for recycling, if available. If not recycled, then puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

## 14 TRANSPORT INFORMATION

**UN Number:**

DOT, ADR, IMDG, IATA

UN3082

**UN Proper shipping name:**

DOT

Environmentally hazardous substances, liquid, n.o.s.

ADR

UN3082 Environmentally hazardous substances, liquid, n.o.s.

IMDG

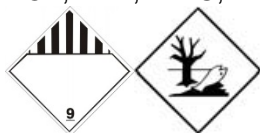
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., MARINE POLLUTANT

IATA

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

**Transport hazard class(es)/Label(s):**

DOT, ADR, IMDG, IATA



9 Miscellaneous dangerous substances and articles

**Packing group:**

DOT, ADR, IMDG, IATA

III

**Environmental hazards:**

**Marine pollutant:**

Yes

**Special marking (ADR):**

Symbol (fish and tree)

**Special marking (IATA):**

Symbol (fish and tree)

**EMS Number:**

F-A,S-F

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:**

Not applicable

**Transport/Additional information:**

In accordance with 49 CFR 171.4(c), non-bulk packagings (max capacity of 119 gal (450 L) or less for liquids or 882 lbs (400 kg) or less for solids) transported by motor vehicle, rail car or aircraft are excepted from all Marine Pollutants regulations in 49 CFR and therefore treated as non-hazardous material. All bulk shipments or any shipment transported partially or entirely by vessel are treated as regulated Marine Pollutants and are shipped according to the requirements listed above.

## 15 REGULATORY INFORMATION

**FIFRA:** Yes

**Product Name:** Sevin Brand 4F

**EPA Reg. No.** 61842-38

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. 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 as required on the pesticide label:

**CAUTION**

Harmful if swallowed, absorbed through the skin, or inhaled.

Avoid breathing spray mist.

Avoid contact with skin, eyes, or clothing.

**Safety, health and environmental regulations/legislation specific for the substance or mixture**


Section 355 (extremely hazardous substances): None of the ingredients is listed.

Section 313 (Toxic Release Reporting-Form R):

<u>Chemical name</u>	<u>CAS No.</u>	<u>Concentration</u>
Carbaryl	63-25-2	43.0%

**TSCA (Toxic Substances Control Act):** Exempt from TSCA

**California Proposition 65**

 **WARNING** WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

**California Proposition 65 - CRT: Listed date/Carcinogenic substance**

Carbaryl (CAS 63-25-2) Listed: February 5, 2010

**California Proposition 65 - CRT: Listed date/Developmental toxin**

Carbaryl (CAS 63-25-2) Listed: February 5, 2010

**CERCLA/SUPERFUND:**

RQ (Reportable Quantity) Carbaryl (100 lbs)

**RCRA Classification**

Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

## 16 OTHER INFORMATION

Issue Date: July 25, 2018

**REVISIONS:** Section 15: Updated Prop 65 Warning language.

The information and recommendations contained herein are provided in good faith and are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information herein.

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