

## SEVIN® XLR PLUS

## MATERIAL SAFETY DATA SHEET

### 1. IDENTIFICATION OF THE SUBSTANCE

**Product name:** SEVIN® XLR PLUS  
 Insecticide  
**UN No.:** 3082  
**Supplier:** Universal Crop Protection (Pty) Ltd.  
**Co. Reg. No.:** 1983/008184/07  
 PO Box 801,  
 Kempton Park, 1620, South Africa  
**Telephone:** (011) 396 2233  
**Fax:** (011) 396 4666  
**Website:** [www.villacrop.co.za](http://www.villacrop.co.za)

#### Emergency telephone numbers:

#### 24 Hr Transport / Spill emergency no:

Envirosure. +27 31 205 4918  
 (Hazcall24) +27 86 044 4411  
 (Client: Villa Crop Protection)  
 Griffon Poison Information Centre +27 82 446 8946  
 (Client: Villa Crop Protection)

#### Poisoning Emergency telephone numbers:

Griffon Poison Information Centre +27 82 446 8946  
 Poisons Information Centre +27 861 555 777

#### Villa Crop Protection Emergency number:

**National Safety, Health and Environmental Manager:**  
 +27 63 698 0668

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

**Common name:** Carbaryl  
**Chemical Name:** 1-naphthyl methylcarbamate (IUPAC)  
**CAS No.:** 63-25-2  
**Chemical Family:** Carbamate  
**Chemical Formula:** C<sub>12</sub>H<sub>11</sub>NO<sub>2</sub>  
**Molecular weight:** 201.2  
**Use:** An insecticide with a residual contact and stomach poison for the control of insect pests as listed on the label.  
**Formulation:** Suspension Concentrate (SC)  
**Symbols:** Xn, N  
**Risk-phrase(s):** R22, R36/37, R40, R50

### 3. HAZARD IDENTIFICATION

**Toxicity class:** WHO II, EPA I  
**ADI:** 0.01 mg/kg b.w  
**Main Hazard:** Harmful to aquatic organisms.  
**Carbaryl** is a carbamate compound, which inhibits cholinesterase. It is toxic. Contact with skin, inhalation of dust or spray, or swallowing may be fatal.  
**Fire and explosion hazard:** Slight fire hazard when exposed to heat or flame. Dust-air mixtures may ignite or explode.

**Biological Hazard:** Likely routes of exposure: May be absorbed from the gastrointestinal tract, through the intact skin, and through inhalation of fine dust.

**Eye contact:** The product is minimally toxic, however caution should be practiced when handling the product. The talc in the product can be irritating to eyes.

**Skin contact:** The product is minimally toxic, however caution should be practiced when handling the product.  
**Carbaryl** and Talc is non-irritating.

**Ingestion:** Toxic by ingestion. See point 4 for symptoms.

**Inhalation:** Toxic by inhalation. See point 4 for symptoms. The carrier, talc, in the formulation can be irritating to the respiratory system.

### 4. FIRST AID MEASURES

**Symptoms/Effects:** Acute: May be harmful if swallowed. Harmful if inhaled or absorbed through the skin. Harmful if it gets in eyes.

Chronic: No known chronic effects.

**Inhalation:** Remove victim from contaminated atmosphere. If breathing is labored, administer oxygen. If breathing has ceased, clear airway and start mouth to mouth resuscitation. If heart has stopped beating, external heart massage should be applied. Obtain immediate medical attention.

This product contains a cholinesterase inhibitor carbamate. The product inhibits cholinesterase resulting in the stimulation of the central nervous system, the parasympathetic nervous system and the somatic motor nerves. If symptoms of carbamate poisoning are present, the administration of atropine sulfate is indicated.

**Skin contact:** Immediately wash with large quantities of water and soap. Remove contaminated clothing immediately under a safety shower. Obtain immediate medical attention.

**Eye contact:** Immediately flush with large quantities of water for 15 minutes. Hold eyelids apart during irrigation to insure thorough flushing of the entire area of the eye and lids. Obtain immediate medical attention.

**Ingestion:** If victim is conscious, rinse mouth with water then give small sips of water. Obtain immediate medical attention or contact the poison control center. Do not induce vomiting unless directed by a physician.

### 5. FIRE FIGHTING MEASURES

**Flammable Properties:** Flash point: >100°C.

**Extinguishing agents:** Carbon dioxide, dry powder or foam.

**Firefighting:** Firefighters should wear self-contained breathing apparatus and full fire-fighting turnout gear. Do not allow extinguishing media into waterways or storm water systems.

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**Special Hazards:** In the vent of fire, carbon monoxide and nitrogen oxide can be released.

**Hazards:** Breathing of vapors.  
 May be fatal if swallowed. Harmful if inhaled or absorbed through the skin. Harmful if it gets into eyes.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Avoid contact with skin and eyes. Do not breathe in dust. For personal protection see Section 8.

**Environmental precautions:** Do not allow entering drains or watercourses. When the product contaminates public waters, inform appropriate authorities immediately in accordance with local regulations.

**Occupational spill:** Do not touch spilled material. Stop leak if you can do so without risk. Use water spray to reduce dust (contain any water used). Neutralize with sodium hydroxide and allow standing for 4 hours. For **small spills**, sweep up with sand or other suitable absorbent material, such as sawdust, and place into containers for later disposal. Move containers from spill area. For **larger spills**, contain material far ahead of spill for later disposal. Keep spectators away. Isolate hazard area and deny entry. Ventilate closed spaces before entering.

### 7. HANDLING AND STORAGE

**Handling:** Toxic by inhalation or if swallowed. Avoid contact with eyes, prolonged contact with skin, and inhalation of dust and vapour. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Remove clothing immediately if this product gets inside. Then wash skin thoroughly using a non-abrasive soap and put on clean clothing. Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination.

**Storage:** The product must be kept under lock and key. Keep out of reach of unauthorized persons, children and animals. Store in its original labeled container in shaded, well-ventilated area, away from heat, sparks and other sources of ignition. Not to be stored next to foodstuffs and water supplies. Local regulations should be complied with.

### 8. EXPOSURE CONTROL / PERSONAL PROTECTION

**Occupational exposure limits:**

**Carbaryl:** Recommended Exposure Limit: 10 Hr Time-Weighted Average: 5 mg/cu m.

**Engineering control measures:** It is essential to provide adequate ventilation. The measures appropriate for a

particular worksite depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

### PERSONAL PROTECTIVE EQUIPMENT:

If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable personal protective equipment including approved respiratory protection.

**Respirator:** An approved respirator suitable for protection from dusts and mists of pesticides is adequate. Limitations of respirator use specified by the approving agency and the manufacturer must be observed.

**Clothing:** Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with the substance.

**Gloves:** Employee must wear appropriate synthetic protective gloves to prevent contact with this substance.

**Eye protection:** The use of full-face protection is recommended.

**Emergency eyewash:** Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** White to beige liquid suspension.

**Odour:** Weak phenolic odour.

**Flammability:** Not flammable.

**Flash Point:** >100°C.

**Solubility in water:** Miscible.

**Viscosity:** 500-700 mPa.s (25°C).

### 10. STABILITY AND REACTIVITY

**Stability:** Stable up to 2 years under recommended storage conditions.

**Incompatibility:** Strong acids or bases.

**Hazardous decomposition:** Thermal decomposition – nitrogen oxides, carbon dioxides.

### 11. TOXICOLOGICAL INFORMATION

**Acute oral LD<sub>50</sub>:**

867 mg/kg in male rats.

575 mg/kg in female rats.

699 mg/kg in male/female combined

**Acute dermal LD<sub>50</sub>:** > 4000 mg/kg in rats.

**Acute inhalation LC<sub>50</sub>:** > 3.8 mg/ℓ (4hrs).

**Acute skin irritation:** Non-irritating.

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**Acute eye irritation:** Slight irritation.  
**Dermal sensitization:** Non-sensitizing.  
**Carcinogenicity:** 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.  
**ACGIH:** **Carbaryl** Group A4.  
**NTP:** None.  
**IARC:** **Carbaryl** Overall evaluation: 3.  
**Teratogenicity:** No human information available.  
**Reproduction:** **Carbaryl** not a reproductive developmental toxicant in a two-generation rat study.  
**Mutagenicity:** A battery of *in vitro* and *vivo* mutagenicity studies have been conducted on **Carbaryl**. Collectively, these studies indicate that **Carbaryl** poses only a slight mutagenic risk.

### 12. ECOLOGICAL INFORMATION

**Degradability:** In soil, the active ingredient is metabolized to form 1-naphthol. The half-life of the product is 7-14 days in sandy loam soils and 14-28 days in clay loam. Soils with high organic matter content retain residues for longer periods than do mineral soils.  
**Mobility:** The product is adsorbed on soil and is unlikely to leach into water sources.  
**Accumulation:** The product adsorbs to soil but shows little or no tendency to bio-accumulate. **Carbaryl** has very limited persistence in the environment.  
**ECOTOXICOLOGY: (TECHNICAL)**  
**Birds:** Minimally toxic to birds.  
 Acute oral LD<sub>50</sub>: > 2179 mg/kg (young mallard ducks)  
 > 2230 mg/kg (Japanese quail)  
 > 2000 mg/kg (young pheasants)  
 1000 to 3000 mg/kg (pigeons)  
**Fish:** Toxic to fish.  
 LC<sub>50</sub> (96 hr): 1.3 mg/l (rainbow trout)  
 10 mg/l (bluegill sunfish)  
 2.2 mg/l (sheepshead minnow)  
**Bees:** Toxic to bees. LD<sub>50</sub> (topical): 1 µg/bee.  
**Daphnia:** Very toxic to Daphnia.  
 Acute toxicity to *Daphnia magna*: EC<sub>50</sub> (48h): 0,006 mg /l  
**Earthworms:** Toxic for earthworms.  
**Beneficial insects:** Toxic to beneficial insects.  
**Soil micro-organisms:** Various soil fungi are able to metabolize **Carbaryl** and in soils previously treated with carbamates and clothocarb, 80 % of **Carbaryl** was completely mineralized to carbon dioxide during a four-week incubation period.

### 13. DISPOSAL CONSIDERATION

**Pesticide disposal:** Contaminated absorbents, surplus product, etc., should be burned at 1000°C in a high-temperature incinerator with effluent gas scrubbing. Where no incinerator is available, hydrolysis under alkaline conditions (pH 12 or above) is a suitable method to dispose of small quantities of the product. Before disposal of the resultant waste, the material must be analyzed to ensure that the active ingredient has been degraded to a safe level. Never pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into water systems. Comply with local legislation applying to waste disposal.  
**Package product wastes:**  
**TRIPLE RINSE** empty containers in the following manner: Invert the empty container over the spray or mixing tank and allow draining for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse the container three times with a volume of water equal to a minimum of a third of that of the container. Add the rinsing to the contents of the spray tank before destroying the container in the prescribed manner. Destroy the container by perforation and flattening and dispose of it in a safe way.  
**Never** re-use the empty container for any other purpose.  
 Prevent contamination of food, feeds, drinking water and eating utensils.

### 14. TRANSPORT INFORMATION

<b>UN NUMBER</b>	3082
<b>ADR/IRD</b>	
Substance name:	Environmentally hazardous Substance, liquid, n.o.s ( <b>Carbaryl</b> 480 g/l)
Label:	9
<b>IMDG/IMO</b>	
Packaging group:	III
Label of class:	9
	<b>Marine pollutant</b>
Shipping name:	Environmentally hazardous Substance, liquid, n.o.s ( <b>Carbaryl</b> 480 g/l)
<b>AIR/IATA</b>	
Shipping name:	Environmentally hazardous Substance, liquid, n.o.s ( <b>Carbaryl</b> 480 g/l)
Class:	9
Hazard Label:	Hazardous
Packaging Group:	III

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## 15. REGULATORY INFORMATION

Next Revision date: June 2024

**Symbol:** Xn, N  
**Indication of danger:** Harmful, Environmentally Dangerous Substance  
**EU Classification:** Carc Cat. 3.

For detailed information on revisions, contact the Registration holder.

**Risk phrases:**

- R 22** Harmful if swallowed.
- R 36/37** Irritating to eyes and respiratory system.
- R 40** Possible risk of irreversible effects.
- R 50** Very toxic to aquatic organisms.

**Safety phrases:**

- S 2** Keep out of reach of children.
- S 22** Avoid breathe dust.
- S 24/25** Avoid contact with skin and eyes.
- S 36/37** Wear suitable protective clothing and gloves.
- S 46** If swallowed, seek medical advice immediately and show label or MSDS.
- S 61** Avoid release to the environment. Refer to special instructions on the label and MSDS.

**National legislation:** In accordance with the South African National Road Traffic Act, 1996 (Act 93 of 1996), the Fire Brigade Act, 1987 (Act 99 of 1987) and the Occupational Health and Safety Act, 1993 (Act. No. 85 of 1993)

## 16. OTHER INFORMATION:

**Packing and Labeling:** Packed in 100, 200, 500 ml and 1, 5, 10 & 20 litres plastic bottles. Labelled according to South African regulations and guidelines.

**Declaration:** All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and is presented in good faith believed to be correct. This information applies to the PRODUCT AS SUCH. In case of formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons in receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces formulation(s) containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.

### END OF DOCUMENT

**Compiled:** September 2012  
**Reviewed:** June 2019  
**Revision no:** (2)



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