



GROUP 4 INSECTICIDE

Credo® SC Insecticide

INSECTICIDE SUSPENSION

For control of lesser mealworm (the darkling beetle *Alphitobius diaperinus*) larvae and adults in poultry facilities

AGRICULTURAL

ACTIVE INGREDIENT: Imidacloprid526 g/L

Contains 1,2-benzisothiazolin-3-one at 0.048% and 5-chloro-2-methyl-4-isothiazolin-3-one at 0.0017% and 2-methyl-4-isothiazolin-3-one at 0.00056% as preservatives

REGISTRATION NUMBER 33014 PEST CONTROL PRODUCTS ACT

READ THE LABEL BEFORE USE

KEEP OUT OF REACH OF CHILDREN



WARNING - POISON

Bayer CropScience Inc. Suite 200, 160 Quarry Park Blvd. S.E. Calgary, Alberta T2C 3G3

Product Information: 1-888-283-6847 www.es.bayer.ca

In case of spills, poisoning or fire, telephone emergency response number 1-800-334-7577 (24 hours a day).

NET CONTENTS: 500 mL to bulk

NOTICE TO USER:

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN AND LIVESTOCK.

Harmful or fatal if swallowed. Harmful if inhaled. Avoid breathing vapour or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

Keep children or pets away from treated surfaces.

DO NOT enter or allow worker entry into treated areas until sprays have dried.

ENVIRONMENTAL HAZARDS

This product is highly toxic to aquatic invertebrates. Keep out of lakes, streams, ponds or other aquatic systems. Do not contaminate water when disposing of equipment wash waters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

This product is toxic to birds.

Apply this product only in accordance with this label.

PERSONAL PROTECTIVE EQUIPMENT

Wear a long-sleeved shirt, long-pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair.

FIRST AID:

Take the container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

IF SWALLOWED: Call a poison control centre 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 centre or doctor. Do not give anything by mouth to an unconscious person.

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 centre or doctor for treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of soap and water for 15-20 minutes. Call a poison control centre 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 by mouth to mouth if possible. Call a poison control centre or doctor for treatment advice.

TOXICOLOGICAL INFORMATION

No specific antidote is available. Treat symptomatically.

STORAGE: 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.

Do not contaminate water, food or feed by storage or disposal. Store in a cool, dry secured storage area. Do not store this product under wet conditions.

PESTICIDE DISPOSAL: For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

DISPOSAL

- 1. Thoroughly empty the contents of the container before disposal.
- 2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
- 3. Make the empty container unsuitable for further use.
- 4. Dispose of the container in accordance with provincial requirements.
- 5. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

ACCIDENTAL SPILLS

Handle and open container in a manner as to avoid spillage. If the container is leaking or material is spilled for any reason or cause, carefully sweep up spilled material and wash exposed area. In spill or leak incidents, keep unauthorized people away. You may contact your provincial emergency response line for decontamination procedures or any other assistance that may be necessary.

[®] TM see <u>www.bayer.ca/tm-mc</u>

[Booklet]



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TABLE OF CONTENTS

Section Number

GENERAL INFORMATION	Notices	1
SAFETY AND HANDLING	Precautions and Protective Clothing and Equipment	2
	First Aid and Toxicological Information	3
	Storage and Disposal	4
DIRECTIONS FOR USE	The Product and General Application Information	5
	Pests, Rates and Application Methods	6
	Resistance Management Recommendations	7

GENERAL INFORMATION

Section 1 - Notices

NOTICE TO USER:

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

SAFETY AND HANDLING

Section 2 - Precautions

KEEP OUT OF REACH OF CHILDREN AND LIVESTOCK.

Harmful or fatal if swallowed. Harmful if inhaled. Avoid breathing vapour or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

Keep children or pets away from treated surfaces.

ENVIRONMENTAL HAZARDS

This product is highly toxic to aquatic invertebrates. Keep out of lakes, streams, ponds or other aquatic systems. Do not contaminate water when disposing of equipment wash waters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

This product is toxic to birds.

Apply this product only in accordance with this label.

PERSONAL PROTECTIVE EQUIPMENT

Wear a long-sleeved shirt, long-pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair.

Section 3 - First Aid and Toxicological Information

FIRST AID:

Take the container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

IF SWALLOWED: Call a poison control centre 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 centre or doctor. Do not give anything by mouth to an unconscious person.

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TOXICOLOGICAL INFORMATION

No specific antidote is available. Treat symptomatically.

Section 4 – Storage and Disposal

STORAGE: 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.

Do not contaminate water, food or feed by storage or disposal. Store in a cool, dry secured storage area. Do not store this product under wet conditions.

PESTICIDE DISPOSAL: For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

DISPOSAL

- 1. Thoroughly empty the contents of the container before disposal.
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ACCIDENTAL SPILLS

Handle and open container in a manner as to avoid spillage. If the container is leaking or material is spilled for any reason or cause, carefully sweep up spilled material and wash exposed area. In spill or leak incidents, keep unauthorized people away. You may contact your provincial emergency response line for decontamination procedures or any other assistance that may be necessary.

DIRECTIONS FOR USE

Section 5 - The Product and General Application Information

THE PRODUCT

Credo SC Insecticide controls lesser mealworm (the darkling beetle *Alphitobius diaperinus*) adults and larvae in poultry facilities. Use Credo SC Insecticide as a broadcast, band, spot, or crack and crevice treatment to floors, walls, and support beams of poultry facilities.

GENERAL APPLICATION INFORMATION

Do not apply when birds are present. Apply between flocks following de-caking/sanitation procedures. Cover or remove exposed feed and water from the area to be treated. Allow treated surfaces to dry before restocking/reintroducing birds into the facility.

DO NOT enter or allow worker entry into treated areas until sprays have dried.

Section 6 – Pests, Rates and Application Methods

Band Application: When lesser mealworms are concentrated in certain areas, such as under feed or water lines, or along the perimeter walls, it may not be necessary to treat the entire poultry house. In these situations, certain portions of the house, or "bands", may be treated. For example, apply diluted Credo SC Insecticide to a 1-m wide band of litter under feed or water lines and/or adjacent to the side and end walls, along with the lower section of the walls, including 0.3 m up onto wood surfaces above the foundation. Be sure to measure the actual area (square meters) to be treated in order to determine the amount of Credo SC insecticide needed for the application.

Whole Poultry House Application (Broadcast Application): When lesser mealworm infestation is severe, the entire poultry house may need to be treated. Apply diluted Credo SC Insecticide as a broadcast spray to the litter covering the entire floor area, especially to litter under feed and water lines, as well as to the lower section of walls, including 0.3 m up onto wood surfaces above the concrete foundation.

In houses with support beams, treat the litter surface around each support post, and 0.3 m up each post. Also apply diluted spray into cracks and crevices around wall insulation, where beetles have been seen or can find harborage.

MIXING INSTRUCTIONS

Determine the area (square meters) to be treated. Refer to Mixing Table below for amount of Credo SC Insecticide to be used. Mix the required amount of Credo SC Insecticide with the appropriate amount of water and apply as a spray. Use 2 - 7.5 L of water to obtain a mixture that will effectively coat the surfaces while providing adequate drying times. Fill the sprayer tank with 1/2 water needed for the treatment. Begin agitating the water and add the required amount of product to the tank. Continue mixing and add the remaining water. Maintain sufficient agitation during product application to ensure a uniform spray. Prepare a fresh spray mixture before each treatment.

Pest	Credo SC Insecticide	Litres of Water *
Lesser Mealworm larvae and adults	90 mL (equivalent to 48 g imidacloprid)	2 – 7.5 L

Mixing Table – per 100 m²

*Use sufficient water to obtain a mixture that will provide effective coverage but not require excessive drying time.

Section 7 - Resistance Management Recommendations

For resistance management, please note that Credo SC Insecticide contains a Group 4 insecticide. Any insect population may contain individuals naturally resistant to Credo SC Insecticide and other Group 4 insecticides. The resistant individuals may dominate the insect population if this group of insecticides is used repeatedly in the same location. Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance management strategies should be followed.

To delay insecticide resistance:

- Where possible, rotate the use of Credo SC Insecticide or other Group 4 insecticides with different groups that control the same pests.
- Insecticide use should be based on an Integrated Pest Management (IPM) program that includes scouting and record keeping, and considers cultural, biological and other chemical control practices.
- Monitor treated pest populations for resistance development.
- Contact your local extension specialist for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.

For further information and to report suspected resistance, contact Bayer CropScience Inc. at 1-888-283-6847 or at *www.cropscience.bayer.ca*.

® TM see <u>www.bayer.ca/tm-mc</u>