

DIRECTIONS FOR USE

NOTICE TO USER: This pest control product is to be used only in accordance with the directions on this label. It is an offence under the Pest Control Products Act to use a control product under unsafe conditions. The user assumes the risk to persons or property that arises from any such use of this product.

Protect-It® is approved for use on the following stored products: feed grains, seed, wheat, barley, buckwheat, corn, oats, rye, flax, peas, soybeans and sorghum. After storage, grain can be used as intended without removal of Protect-It®.

Protect-It® is approved for use for the following stored product insects: rusty grain beetle, rice weevil, granary weevil, Indian meal moth, Mediterranean flour moth, Angoumois grain moth, red flour beetle and Tribolium.

Protect-It® can be used in dry empty containers where grain is transported or stored, such as silos, grain elevators, food and/or feed processing facilities, rail cars, ships, trucks, trailers, as well as appropriate cans, drums and packages. The structure must remain empty for 1-2 weeks. For maximum effectiveness the relative humidity must remain below 55%, and the temperature above 15°C.

General, spot, and crack and crevice treatment: Protect-It® can be applied as a dust or in a slurry. As a dust Protect-It® is best used in dry, empty structures. Use a dust blower to place Protect-It® into the cracks and crevices of the structure. For treatment of surfaces, spot treatments, or exterior application, Protect-It® can be applied either as a dust so that residues are about 5 g/m², or as a slurry application so that residues are about 7 g/m². Surfaces include such areas as walls and floors, whereas spot treatments are areas smaller than about 1.5 - 2.0 m². For applications as a slurry, thoroughly mix 1.4 kg of Protect-It® with 10 litres of water. Use 0.5 litres of mixture per 10 m², or 5 litres per 100 m², so that Protect-It® residues are 7 g/m². For vertical surfaces, Protect-It® can be applied as a slurry so that residues are about 7 g/m².

Treatment for stored grain: Protect-It® may be applied to grain at any stage of preparation or transportation after drying and cleaning, and prior to storage. Dust should be mixed thoroughly with all grain to be stored. Protect-It® may be applied to grain as it enters the auger or conveyor feeder system during transfer of grain into storage facilities or into transportation containers.

Commodity	Rate of Protect-It per metric ton (g/tonne)	
	Rusty grain beetle	Other listed insects
Wheat	100	500
Barley	150	500
Oats, Buckwheat, Peas Rye, Flax, Soybeans	500	500
Feed grains, Seed, Corn, Sorghum	1000	1000

To control accessible stages of Indian meal moth, Mediterranean flour moth and Angoumois grain moth: Apply to surface of binned grain at the rate of 500 g/100 m². Apply at monthly intervals with the first appearance of moths and continue until early fall. In severe infestations break up webbing with a rake before dusting and make second application within two weeks.



Ready-to-Use Insecticidal Dust

*For Insect Control in Stored Grain,
Warehouses and Processing Facilities*

Hedley Technologies Ltd.

170 Attwell Drive, Suite 520
Toronto, Ontario, Canada M9W 5Z5
Tel: 1-888-476-4473
www.hedleytech.com

GUARANTEE

**Silicon Dioxide (present as 100% Diatomaceous Earth) 74%
Silica Aerogel 10%**

**COMMERCIAL - AGRICULTURAL
READ THE LABEL BEFORE USING
REGISTRATION NO. 24259
PEST CONTROL PRODUCTS ACT
KEEP OUT OF REACH OF CHILDREN**

NOTICE TO BUYER: Seller's guarantee shall be limited to the terms set out on the label and subject thereto, the buyer assumes the risk to persons and property arising from the use or handling of this product, and accepts the product on that condition.

Patent 2,149,164

Made in Canada

121-CAN

NET CONTENTS 5.0 kg (contents may settle)

SAFETY AND MODE OF ACTION

Diatomaceous earth (DE) is formed with mineral skeletons of countless single-celled plankton called diatoms. DE is extremely stable and does not produce toxic chemical residues or react with other substances in the environment. The active substance is amorphous silicon dioxide which is registered as a food additive. DE is used in many commercial products. **Protect-It®** absorbs the cuticular lipid layer on the insect. With this protective layer corrupted, the insect is unable to retain moisture, and as a result the insect dies from dehydration. Optimum conditions are low grain moisture content and lower relative air humidities.

PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN

Avoid contact with eyes. Use adequate ventilation and avoid breathing dust. Causes irritation and soreness in throat and nose in cases of extreme exposure. Some congestion may occur. Not hazardous when ingested. Wear a suitable dust mask approved by NIOSH/MSHA when handling. For applications to stored grain or when using a dust blower, wear a full-face NIOSH-approved respirator during mixing, loading and application.

For use in Food and/or Feed Processing Facilities:

Apply only when plant is not in operation. Cover or remove all food processing equipment, packaging material and utensils before application. Wash all surfaces that may contact food and rinse with potable water before re-use.

FIRST AID: If eye irritation occurs, hold eye open and rinse slowly and gently with water for 15-20 minutes. Removed contact lenses, if present, after the first 5 minutes, then continue rinsing eye. 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 further treatment advice. Take container, label or product name and Pest Control Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION: Treat symptomatically.

DISPOSAL: Thoroughly empty the contents of the container into the application device. Do not reuse container. Follow provincial instructions for any required additional cleaning of the container prior to its disposal. Make empty container unsuitable for use. Dispose of the container in accordance with provincial requirements. For information on the disposal of unused, unwanted product and the cleanup of spills, 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.

STORAGE: Store in a cool and dry area.

This product has been found to affect test weight and flowability of wheat and barley when treating stored grain (see table below). It is the responsibility of the owner of the grain to insure that the application of **Protect-It®** will not degrade the grain on account of test weight loss.

Commodity	Average Test Weight Losses (kg/hl) for Three Commodities			
	Application rates of 0.1, 0.15 & 0.5 kg/tonne of grain (100, 150 & 500 ppm)			
	Application Method	Test Weight Reduction (kg/hl) 100 ppm	150 ppm	500 ppm
Hard Red Spring Wheat (3% dockage)	dry	3.4	5.3	
Durum Wheat (commercially cleaned)	dry	3.0	5.2	
Barley (1.5% dockage)	dry		8.6	

According to grain regulations visual detection of **Protect-It®** on grain will cause the grain to be down-graded to due to adhered foreign material. Under normal circumstances, **Protect-It®** is not visible on grain at concentrations up to 400 ppm.

The Canadian Grain Commission recommends that wheat contain no more than 100 ppm **Protect-It®**. Wheat containing more than 100 ppm diatomaceous earth can be diluted by mixing with untreated wheat. Because the dehydration process progresses slowly, treated wheat should not be mixed with untreated wheat for 4 weeks after treatment with **Protect-It®**.