



Fact Sheet

BACKGROUND

- Public perception of food safety increasingly important
- Applicator safety is a primary concern for pesticide applicators
- To conserve value of grain it is necessary to protect it from insects
- Need for pesticides that are safe and effective with no residue concerns
- Limited stored product insecticides are currently available
- Government regulations may restrict the availability and use of chemical stored grain insecticides and fumigants in the future
- Absolutely no odour and no need for expensive safety equipment (dust mask and goggles)

PROTECT-IT®

- Latest generation Diatomaceous Earth (DE)-based pesticide
- Made of DE and silica gel, which are both forms of amorphous silica
- Absorbs waxy coating from insect body causing water loss and death
- Recommended at lowest doses of any DE product
- Made specifically for use in grain and grain handling and food processing facilities
- Effective structural and grain insecticide
- Excellent IPM tool, which can be considered a direct or indirect alternative to stored grain chemical insecticides

BENEFITS

- No need to worry about chemical residues or food safety
- No applicator certification or special storage provisions necessary
- No waiting period after application of Protect-It®
- Safe to applicator, grain handlers, processors and consumers
- Very persistent, will not degrade or dissipate so long as the grain is in storage
- Broad spectrum of pests, including weevils, rusty grain beetles and flour beetles
- No need to cover or clean food processing equipment during or after application of Protect-It®
- Will not affect milling, baking or malting quality
- Can be used in or around animal feeds
- Certified Organic

APPLICATION

- Easy and inexpensive for empty bin application before loading
- Mass treatment suitable for very long term storage or for finished product
- Layer treatment plus top dressing suitable for standard protection for on-farm or commercial storage
- Top dressing compatible with flat storage or for after "coring" bins
- Crack and crevice and general structural treatment for processing facilities

APPLICATION EQUIPMENT

- Easily applied to empty bins using bin aeration equipment or Hedley's Air Application Kit
- For application to grain, can be applied by hand as grain is conveyed
- For larger commercial-scale application, automatic feeders are available
- Air driven Air Application Kit used for top dressing
- Bulb dusters, Air Applicator or electric blowers suitable for processing facilities

RESEARCH

- Agriculture and Agri-Food Canada – wheat and barley field trials
- Oklahoma State-empty bin treatment and treatment of peanuts
- Purdue-empty bin treatment
- USDA and Agriculture and Agri-Food Canada-heat/Protect-It® for flour mills
- Laboratory testing conducted by USDA, Minnesota State, Oklahoma State
- Field tested in Eastern Europe, Asia and North America
- Generally acknowledged by research community as the most effective DE pesticide in North America

WHO SHOULD USE PROTECT-IT®?

- Farmers for application to empty bins and protection of grain on farm
- Commercial elevators for application to empty silos and flat storage and for application to grain (food or feed) destined for medium to long-term storage
- Food processors for structural application, e.g., crack and crevice treatment and application to grains in-store
- Food processors, pet food manufacturers for occasional Protect-It®/heat combination treatment as a replacement for facility fumigation
- Birdseed processors for direct application of Protect-It® to finished product
- Food warehouses for general structural application

For more information contact...



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