

FREQUENTLY ASKED QUESTIONS

STORED GRAIN PROTECTION, ANSWERED

ALWAYS READ THE LABEL BEFORE OPENING OR USING

Freezone
smart
grain

dual



GRAIN PROTECTANT

600 g/L FENITROTHION
60 g/L (S)-METHOPRENE

GROUP

1B

7A

INSECTICIDE

Your practical guide to protecting stored cereal grains, including malting barley.

TREATS
50t
PER 500 mL

UP TO
9
months
PROTECTION



APVMA APPROVED
MANUFACTURED IN AUSTRALIA

Protect the harvest. Protect the margin.

01

THE BASICS

This FAQ answers the most common questions about Smartgrain Dual, our advanced grain protectant for stored cereal crops. Whether you're protecting a small harvest or managing large storage operations, you'll find practical answers about product application, effectiveness and compliance here.

Q Why should I use a grain protectant or fumigant?

Protecting your grain investment makes business sense. Once harvested, grain faces real threats from stored grain insect pests that can significantly reduce quality and yield. A solid protection strategy minimises contamination risk, maintains grain condition through longer storage periods and ultimately protects your profit margin. Without protection, you're essentially leaving your crop vulnerable during months of storage.

Q How do grain protectants differ from fumigants?

Fumigants are typically used as a treatment for already-infested grain or as a clean-up treatment for storage facilities. Protectants, by contrast, are applied to clean grain before storage to prevent infestation from occurring in the first place.

**Fumigants clean up.
Protectants protect & preserve.**

Q What is Smartgrain Dual?

Smartgrain Dual is an advanced grain protectant containing two active ingredients: fenitrothion (600 g/L) and (S)-Methoprene (60 g/L). This dual-active formula is manufactured in Australia, APVMA approved and specifically designed to protect stored cereal grains including malting barley. It controls a broad spectrum of stored grain insect pests, including organophosphorus-resistant strains, and provides protection for up to 9 months.

Two actives. One product.

02

HOW IT WORKS

Q Why use both fenitrothion and methoprene together?

The combination creates a comprehensive protection strategy. Fenitrothion is a highly effective adulticide that kills adult insects, while (S)-Methoprene is an insect growth regulator that disrupts reproduction. Together, they tackle both existing pest populations and provide long-term protection of up to 9 months. The (S) isomer delivers maximum effectiveness with lower residue levels.

600 g/L

FENITROTHION

Adulticide. Kills adult insects.



60 g/L

(S)-METHOPRENE

Insect Growth Regulator.
Disrupts reproduction & stops new adults from emerging.

= UP TO 9 MONTHS OF PROTECTION with lower residue levels

Q How many tonnes does Smartgrain Dual treat?

500 mL BOTTLE MAKES
50 L AND TREATS

50t

OF GRAIN

2.5 L BOTTLE MAKES
250 L AND TREATS

250t

OF GRAIN



SMARTGRAIN DUAL CAN BE CO-MIXED WITH SPINOSAD

Right application. Right result.

03

APPLICATION

Q How do I apply Smartgrain Dual?

Apply through standard grain spraying equipment at 1 litre of diluted spray per tonne of grain. The spray rate must be predetermined so that litres delivered per hour equal the auger or elevator throughput in tonnes per hour.

Elevator delivery rate tonnes per hour	10	30	40	50
Dilute spray collected from nozzle litres in 3 mins	0.5	1.5	2.0	2.5

Spray calibration guide at 1 L of diluted spray per tonne of grain.

Q Can Smartgrain Dual be applied to any cereal commodity?

Smartgrain Dual is approved for use on all stored cereal grains, including:

Malting barley

Maize

Sorghum

Wheat

Rice

Oats

Q How long after application can I move the treated grain?

There is a 24-hour restraint period. Do not move treated grain within 24 hours after treatment. After this period, your grain can be handled and transported normally. This is to ensure product has dried.

Q Is there a specific time to apply Smartgrain Dual?

Apply to incoming grain before it enters storage. Best practice is to treat grain as it's being loaded into storage facilities, ensuring complete coverage and immediate protection.

Every key pest. Up to 9 months.

04

PESTS & PROTECTION

Q Does Smartgrain Dual control key Australian grain storage pests?

Smartgrain Dual is registered to treat all key stored grain insect pests, including organophosphorus-resistant strains. This comprehensive coverage makes it highly effective across Australian grain storage conditions.

Grain weevil

incl. organophosphorus-resistant strains

Lesser grain borer

Rust-red flour beetle

Confused flour beetle

Saw-toothed grain beetle

Tropical warehouse moth

Excluding Sitophilus spp.

UP TO

9 months

PROTECTION

Does Smartgrain Dual provide residual control?

Yes. Smartgrain Dual provides residual protection for up to 9 months when applied according to the product label. This extended window means your grain stays protected throughout most storage seasons without reapplication.

Q Can I use Smartgrain Dual on already-infested grain?

Infested grain should first be fumigated with an approved fumigant product prior to application of Smartgrain Dual.

Q Can I use Smartgrain Dual to retreat grain?

Yes. Smartgrain Dual can be used for an unlimited number of retreats.

Q Does Smartgrain Dual have a withholding period?

No. Smartgrain Dual has no withholding period when used as directed.

Cleaner Grains. Greener Grains.

05

SAFETY & COMPLIANCE

Q Is Smartgrain Dual safe for food-grade grain storage?

Yes. Smartgrain Dual is formulated using the latest food-grade formulation and is specifically approved for use on stored cereal grains intended for food and malt purposes when applied according to label directions.

What should I do if I accidentally expose myself to Smartgrain Dual?

If product contacts skin, immediately wash the area with soap and water. If swallowed, splashed in eyes or inhaled, contact the Poisons Information Centre or a doctor immediately.

POISONS INFO (AU) **13 11 26**

POISONS INFO (NZ) **0800 764 766**

TRANSPORT EMERGENCY **000**

Q Can I export grain treated with Smartgrain Dual?

Grain treated with Smartgrain Dual can be exported. Maximum Residue Limits (MRLs) or import tolerances may not exist in all markets for cereal grains that have been treated with fenitrothion. Before treating grain intended for export, check the specific MRL requirements or import tolerances in your destination market.

Q Why should I check export requirements before treatment?

Different countries have different Maximum Residue Limits. If grain doesn't meet the importing country's tolerance levels, it may be rejected. Checking requirements upfront ensures your treated grain will be accepted at destination markets.

Q How often should I monitor stored grain?

Inspect treated grain for live insects and general condition every 8 weeks. For unsealed silos and other unsealed storage, monthly inspection may be required.

Need specific technical advice?

Talk to your local AIRR or Freezone representative.

Freezone