



# Pest e-alerts



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## Sensat – A New Product for Stored Grain Protection

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There is a new stored grain protectant that we have anticipated having for many years. Why talk about it now? Because availability may be an issue. Contact your insecticide supplier now to be sure that you have it at harvest time next year.



## Sensat™



Sensat™ is an effective, reduced risk insecticide for the protection of stored grains including wheat, triticale, corn, sorghum, barley, oats, millet, and bird seed. It contains spinosad, the first new active ingredient to be brought to the stored grain industry in several years. Spinosad is a novel active ingredient derived through fermentation of a naturally occurring soil bacterium, *S. spinosa*. This product is also effective on insect pests that have developed resistance to other stored grain insecticides. Another advantage of Sensat is that it allows treated grain to be used immediately for feed, stored food, and oil with no waiting period after treating the grain.

Sensat is a 0.73 pound active ingredient per gallon flowable formulation that can be used to protect stored grains and other commodities from insect damage at an active ingredient concentration of 1 ppm by weight. It protects stored food, feed, and oil grain commodities against injury from insect pests including lesser grain borer, confused flour beetle, flat grain beetle, Indianmeal moth, Angoumois grain moth, rice moth, and almond moth. Insect pests such as rice weevil, granary weevil, maize weevil, red flour beetle, rusty grain beetle, and sawtoothed grain beetle are suppressed to low levels. Protection is achieved by breaking the pest life cycle through control of adults and/or immature life stages.

For optimum results, thoroughly clean and treat grain storage areas prior to storage of grain. If the grain is infested, fumigate with a registered insecticide to control existing populations and then apply Sensat for residual protection.

For commodities typically treated per 1,000 bushels, dilute Sensat (see Table 1.) with water, mix thoroughly, and occasionally agitate. Apply 5 gallons of spray mixture per 1,000 bushels of grain as a course spray to the moving grain stream. For crops typically treated per ton (bird seed or any other crop listed in the table) apply 0.35 fl. oz. or 10.4 ml per ton to deliver 1 ppm of active ingredient.

Table. 1. Application rates for crops typically treated per 1,000 bushels.

Target Crop	Sensat per 1,000 bushels* (to deliver 1 ppm)	
	fl oz	ml
Barley	8.2	242
Bird seed	See rate/ton	See rate/ton
Corn (field, sweet, pop, grown for seed)	9.8	290
Millet, foxtail	8.7	257
Millet, pearl	5.9	174
Millet, proso	9.8	290
Oats	5.9	174
Sorghum (Milo)	9.8	290
Triticale	10.3	305
Wheat	10.5	310

\*Application rates are based on nominal commodity test weight.

Top Dressing Treatments: These treatments are not as effective as treating the entire grain mass, but they can provide significant protection from some insects such as the Indianmeal moth. For each 1,000 sq. ft. of surface area, mix 2.6 fl. oz. of Sensat in 2.0 gallons of water. Apply one-half of the total application amount evenly across the surface and then rake to a depth of at least four inches. Complete the treatment by applying the remaining half to the surface and leave undisturbed.

## RECOMMENDATIONS AND RESTRICTIONS

- International tolerances and residue limits for crops and commodities treated with this product may not yet be established in one or more countries outside the United States. For this reason, Sensat should be used only on crops and commodities intended for consumption in the United States or on crops and commodities that will be imported to a country where you have confirmed the specific import residue policies and applicable residue limits per such import.
- Avoid application at extremely dusty sites.
- When drying grain, apply Sensat after the grain has cooled.
- Do not treat grain more than once.
- Maintain accurate records, especially if commodity is destined for export.
- Calibrate application equipment and grain flow rates daily and when significant changes occur to ensure proper application rates.
- Always start with clean storage bins that have been treated with a protectant with a different mode of action.
- For resistance management, rotate chemical modes of action yearly.
- No withholding period is required for grain used for food, feed, or oil purposes.
- Always shake container well before mixing to suspend product that may have settled during storage.

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### Plant Disease and Insect Diagnostic Laboratory

The pesticide information presented in this publication was current with federal and state regulations at the time of printing. The user is responsible for determining that the intended use is consistent with the label of the product being used. Use pesticides safely. Read and follow label directions. The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Cooperative Extension Service is implied.

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