

GROUP 4A INSECTICIDE

GROUP 4 | 11 | 12 FUNGICIDES



## Insecticide with Three Fungicides

*A seed treatment product for protection against damage from listed insects, seed-borne diseases, and seedling diseases on legume vegetables (including soybeans)*

**ACTIVE INGREDIENTS:**

Thiamethoxam* . . . . .	22.60%
Mefenoxam** . . . . .	1.70%
Fludioxonil*** . . . . .	1.12%
Azoxystrobin**** . . . . .	0.90%

**OTHER INGREDIENTS:** . . . . . 73.68%

**TOTAL:** . . . . . 100.00%

\*CAS No. 153719-23-4

\*\*CAS No. 70630-17-0 and CAS No. 69516-34-3

\*\*\*CAS No. 131341-86-1

\*\*\*\*CAS No. 131860-33-8

One gallon of Seed Shield Beans contains 2.13 lb. thiamethoxam, 0.16 lb. mefenoxam, 0.11 lb. fludioxonil and 0.08 lb. azoxystrobin.

**KEEP OUT OF REACH OF CHILDREN.  
CAUTION**

See additional precautionary statements and directions for use in booklet.

SCPPL-HEL 1384A-L1A 0812  
4019356  
AD 080312

NET CONTENTS:  
15 gallons

EPA Reg. No. 100-1384-5905  
EPA Est. 100-NE-001

Manufactured For  
**HELENA CHEMICAL COMPANY**

225 SCHILLING BOULEVARD, SUITE 300 • COLLIERVILLE, TENNESSEE 38017

## NOTES

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<b>FIRST AID</b>	
<b>IF IN EYES</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF SWALLOWED</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF ON SKIN OR CLOTHING</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF INHALED</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>HOT LINE NUMBER</b>	
For 24-Hour Medical Emergency Assistance (Human or Animal) Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident) Call Chem-Trec at <b>1-800-424-9300</b>	

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## PRECAUTIONARY STATEMENTS

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### Hazards to Humans and Domestic Animals

## CAUTION

Causes moderate eye irritation. Harmful if swallowed. Wash thoroughly with soap and water after handling, and before eating, drinking, chewing gum, using tobacco, or using the toilet. Avoid contact with eyes, skin, or clothing.

### Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category C on an EPA chemical resistance category selection chart.

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material – Category C (e.g., barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride [PVC] ≥14 mils or Viton® ≥14 mils)
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

### Engineering Control Statements

When handlers use closed systems in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

### **User Safety Recommendations**

**Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

### **Environmental Hazards**

This product is toxic to wildlife, freshwater and estuarine/marine fish and highly toxic to aquatic invertebrates. Runoff may be hazardous to aquatic organisms in neighboring areas. Exposed treated seed may be hazardous to wildlife. Do not contaminate water when disposing of equipment wash water.

Thiamethoxam is highly toxic to bees exposed to direct treatment, and effects may be possible as a result of exposure to translocated residues in blooming crops. Thiamethoxam has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow.

Mefenoxam is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

Azoxystrobin in this product can be persistent for several months or longer. Azoxystrobin degradation products and thiamethoxam have properties and characteristics similar to chemicals which are known to leach through soil to groundwater under certain conditions as a result of agricultural use. Use of these chemicals in areas where soils are permeable, particularly where the water table is shallow may result in ground water contamination.

### **Physical and Chemical Hazards**

Do not use, pour, spill or store near heat or open flame.

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## **CONDITIONS OF SALE - LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES**

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**Read the Conditions of Sale - Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return the product, unopened, and the full purchase price will be refunded.**

The directions on this label are believed to be reliable and should be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions or the failure to follow the label directions or good application practices, all of which are beyond the control of Helena Chemical Company (the "Company") or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the factors noted above which are beyond the control of the Company. To the extent consistent with applicable law, The Company makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

The exclusive remedy against the Company for any cause of action relating to the handling or use of this product shall be limited to, at Helena Chemical Company's election, one of the following:

1. Refund of the purchase price paid by buyer or user for product bought, or
2. Replacement of the product used

To the extent allowed by law, the Company shall not be liable and any and all claims against the Company are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income. The Company and the seller offer this product and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.

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## DIRECTIONS FOR USE

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It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

**Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours.**

Exception: If the seed is treated with the product and the treated seed is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material – Category C (e.g., barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride [PVC] ≥14 mils or Viton® ≥14 mils)
- Shoes plus socks

### FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR INSECT AND/OR DISEASE CONTROL, AND/OR ILLEGAL RESIDUES.

Treatment of highly mechanically scarred or damaged seed, or seed known to be of low vigor and poor quality may result in reduced germination and/or reduction of seed and seedling vigor. Treat a quantity of seed using equipment similar to that planned for treating the total seed lot. Prior to treatment, conduct germination tests on a portion of seed before committing the total seed lot to a selected seed treatment.

Due to seed quality, crop or variety sensitivity, and seed storage conditions beyond the control of Helena, no claims are made to guarantee the germination of seed or propagating material for all crop seed when treated with Seed Shield Beans.

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## USE INFORMATION

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Seed Shield Beans is a seed treatment product containing the active ingredients: thiamethoxam (insecticide) and azoxystrobin, fludioxonil and mefenoxam fungicides. Seed Shield Beans protects against damage from listed early season insects, soil-borne and seed-borne diseases of crop plants.

Thiamethoxam is a systemic seed treatment insecticide belonging to the neonicotinoid class of chemistry. Thiamethoxam protects against listed chewing and sucking insects through contact and ingestion.

Mefenoxam fungicide is active against *Pythium*, *Phytophthora* and systemic downy mildew.

Fludioxonil fungicide is active against *Fusarium*, *Rhizoctonia*, and suppresses seed-borne *Sclerotinia* and *Phomopsis* species.

Azoxystrobin is active against *Rhizoctonia* and some seed-borne diseases.

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## MIXING PROCEDURES

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**Important:** Always re-circulate Seed Shield Beans thoroughly before using.

Apply Seed Shield Beans as a water-based slurry utilizing standard slurry seed treatment equipment which provides uniform seed coverage. Uneven or incomplete seed coverage may not give the desired level of disease control. Thoroughly mix the specified amount of Seed Shield Beans into the required amount of water or liquid inoculant for the slurry treater and dilution rate to be used.

Certain crops require addition of inoculants when the seed is treated or planted. Seed Shield Beans is compatible with several liquid inoculant products. Consult the maker of the inoculant product and a Helena Chemical Company representative for directions before applying Seed Shield Beans with inoculants.

Under certain disease conditions, additional amounts of fungicides may be required. When needed, apply additional Apron XL® according to the **CROP USE DIRECTIONS**. Other tank mix partners may be used with Seed Shield Beans; however, the user must consider the use rate, formulation, seed and crop safety factors and compatibility of each product to be mixed when determining the total application volume.

The total application volume must be sufficient to provide desired level of coverage. Dilution is typically done with water or liquid inoculants. The minimum slurry volume to achieve adequate coverage is 4.0 fluid ounces per 100 pounds of seed. More diluent may be required to obtain complete coverage.

Continuous agitation or mixing of the slurry mixture is necessary to prevent settling out of the solution.

Allow seed to dry before bagging.

The typical density of Seed Shield Beans is 9.43 pounds per gallon. Consult the manufacturer of the application equipment you plan to use for suitability for this application and for instructions on operation and calibration of the equipment. Follow the manufacturer application instructions for the seed treatment equipment being used.

Follow planter manufacturer specifications for use of talc or other hopper box additives at planting. Seed must be completely dry before adding to planter.

Seed Shield Beans contains an EPA approved dye/colorant that imparts an unnatural color to the seed as stated in 40 CFR 153.155.

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## USE RESTRICTIONS

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- Store away from feeds and foodstuffs.
- Wear long-sleeved shirt, long pants and chemical resistant gloves when handling treated seed.
- Treated seeds exposed on soil surface may be hazardous to wildlife. Cover or collect treated seeds spilled during loading.
- Do not contaminate water bodies when disposing of planting equipment wash waters.
- Dispose of seed packaging in accordance with local requirements.
- Forage may not be grazed until 30 days after planting.
- Do not allow children, pets, or livestock to have access to treated seed.
- Treated seed must be planted into the soil at a depth greater than 1 inch.
- Dispose of all excess treated seed. Leftover treated seed may be doublesown around the headland or buried away from water sources in accordance with local requirements.
  - Excess treated seed may be used for ethanol production only if (1) by-products are not used for livestock feed and (2) no measurable residues of pesticide remain in ethanol by-products that are used for agronomic practice.
- Do not use at a rate that will result in more than 0.266 lb. thiamethoxam per acre (120.66 grams a.i./A) per year.
- With the exception of soybeans, do not make any soil or foliar application of products containing thiamethoxam to crops grown from seed treated with Seed Shield Beans. For soybeans, do not apply a neonicotinoid insecticide within 45 days of planting seed treated with Seed Shield Beans.

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## ROTATIONAL RESTRICTIONS

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In the event of a crop failure or harvest of a crop grown from Seed Shield Beans treated seed, the field may be replanted immediately to alfalfa, *Brassica* (cole) leafy vegetables, cereal grains (including barley, buckwheat, corn, pearl millet, proso millet, oats, popcorn, rice (dry-seeded), rye, sorghum, teosinte, triticale, wheat and wild rice), canola, cotton, cucurbit vegetables, dry bulb onions, fruiting vegetables, leafy vegetables, legume vegetables (including soybeans), mint (peppermint and spearmint), oil seed crops (rapeseed, Indian rapeseed, Indian mustard seed, field mustard seed, black mustard seed, flax seed, safflower seed, crambe seed and borage seed), root vegetables, strawberry, sunflowers, tobacco, and tuberous and corm vegetables. For any other crop, the minimum plant-back interval is 120 days from the date Seed Shield Beans treated seed was planted. A cover crop other than the crops listed above that is planted for erosion control or soil improvement may be planted sooner than the 120 day interval; however, the crop may not be grazed or harvested for food or feed.

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## SEED BAG LABEL REQUIREMENTS

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Federal law requires that bags containing treated seeds shall be labeled with the following statements:

- This seed has been treated with thiamethoxam insecticide and azoxystrobin, fludioxonil and mefenoxam fungicides.
- Do not use for feed, food, or oil purposes.
- User is responsible for ensuring that the seed bag meets all requirements under the Federal Seed Act.

In addition, the U.S. Environmental Protection Agency requires the following statements on bags containing seeds treated with Seed Shield Beans:

- Ground Water Advisory:

Thiamethoxam has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow. Mefenoxam is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

Azoxystrobin in this product can be persistent for several months or longer. Azoxystrobin has degradation products which have properties similar to chemicals which are known to leach through soil to groundwater under certain conditions as a result of agricultural use. Use of azoxystrobin in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

- Pollinator Precautions: Thiamethoxam is highly toxic to bees, and effects are possible as a result of exposure to translocated residues in blooming crops.
- Excess treated seed may be used for ethanol production only if (1) by-products are not used for livestock feed and (2) no measurable residues of pesticide remain in ethanol by-products that are used for agronomic practice.
- Store away from feeds and foodstuffs.
- Wear long-sleeved shirt, long pants and chemical resistant gloves when handling treated seed.
- Treated seeds exposed on soil surface may be hazardous to wildlife. Cover or collect treated seeds spilled during loading.
- Do not contaminate water bodies when disposing of planting equipment wash waters.
- Dispose of seed packaging in accordance with local requirements.
- In the event of a crop failure or harvest of a crop grown from Seed Shield Beans treated seed, the field may be replanted immediately to alfalfa, *Brassica* (cole) leafy vegetables, cereal grains (including barley, corn, pearl millet, proso millet, oats, popcorn, rice (dry-seeded), rye, sorghum, teosinte, triticale, wheat and wild rice), canola, cotton, cucurbit vegetables, dry bulb onions, fruiting vegetables, leafy vegetables, legume vegetables (including soybeans), mint (peppermint and spearmint), oil seed crops (rapeseed, Indian rapeseed, Indian mustard seed, field mustard seed, black mustard seed, flax seed, safflower seed, crambe seed and borage seed), root vegetables, strawberry, sunflowers, tobacco, and tuberous and corm vegetables. For any other crop, the minimum plant-back interval is 120 days from the date Seed Shield Beans treated seed was planted. A cover crop other than the crops listed above that is planted for erosion control or soil improvement may be planted sooner than the 120 day interval; however, the crop may not be grazed or harvested for food or feed.

- Forage may not be grazed until 30 days after planting.
- Do not allow children, pets, or livestock to have access to treated seed.
- Treated seed must be planted into the soil at a depth greater than 1 inch.
- Dispose of all excess treated seed. Leftover treated seed may be doublesown around the headland or buried away from water sources in accordance with local requirements.
- Do not use at a rate that will result in more than 0.266 lb. thiamethoxam per acre (120.66 grams a.i./A) per year.
- With the exception of soybeans, do not make any soil or foliar application of products containing thiamethoxam to crops grown from seed treated with Seed Shield Beans. For soybeans, do not apply a neonicotinoid insecticide within 45 days of planting seed treated with Seed Shield Beans.

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## **CROP USE PRECAUTIONS**

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### **Resistance Management**

Seed Shield Beans contains thiamethoxam, a Group 4A insecticide; fludioxonil, a Group 12 fungicide; mefenoxam, a Group 4 fungicide; and azoxystrobin, a Group 11 fungicide.

Some insect pests are known to develop resistance to products after repeated use. Because resistance development cannot be predicted, the use of this product should conform to sound resistance management strategies established for the crop and use area. Helena encourages responsible product stewardship to ensure effective long-term control of the insects on this label.

If resistance to this product develops in your area, this product, or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for your area.

Seed Shield Beans contains a Group 4A insecticide (thiamethoxam, belonging to the neonicotinoid class of chemistry). Insect biotypes with acquired or inherent resistance to Group 4A insecticides may eventually dominate the insect population if Group 4A insecticides are used repeatedly as the predominant method of control for targeted species. This may result in partial or total loss of control of those species by Seed Shield Beans or other Group 4A insecticides.

### **In order to maintain susceptibility to this class of chemistry:**

- Avoid using Group 4A insecticides exclusively for season long control of insect species with more than one generation per crop season.
- For insect species with successive or overlapping generations, apply Seed Shield Beans or other Group 4A insecticides using a “treatment window” approach. A treatment window is a period of time as defined by the stage of crop development and/or the biology of the pests of concern. Within the treatment window, depending on the length of residual activity, there may either be single or consecutive applications (seed treatment, soil, foliar, unless otherwise stated in Directions for Use) of the Group 4A insecticides. Do not exceed the maximum Seed Shield Beans allowed per growing season.
- Following a treatment window of Group 4A insecticides, rotate to a treatment window of effective products with a different mode of action before making additional applications of Group 4A insecticides.
- A treatment window rotation, along with other IPM practices for the crop and use area, is considered an effective strategy for preventing or delaying a pest’s ability to develop resistance to this class of chemistry.
- If resistance is suspected, do not reapply Seed Shield Beans or any other Group 4A insecticides.

### **Other Insect Resistance Management (IRM) practices include:**

- Incorporating IPM techniques into your insect control program.
- Monitoring treated insect populations for loss of field efficacy.
- Using tank-mixtures or premixes with insecticides from a different target site of action group as long as the involved products are all registered for the same crop outlet and effective rates are applied.



### For additional information on Insect Resistance Management:

- Contact your local extension specialist, certified crop advisor and/or product manufacturer for additional insect resistance management recommendations.
- Visit the Insecticide Resistance Action Committee (IRAC) on the web at: <http://www.irac-online.org/>.

Seed Shield Beans contains the fungicide mefenoxam, a systemic fungicide having a specific mode of action against fungal pathogens.

**Note:** The fungicide mefenoxam contained in this product could be subject to development of insensitive strains of fungi or may be ineffective against naturally occurring strains of fungi. Development of insensitivity or natural tolerance cannot be predicted. Therefore, Helena cannot assume liability for crop damage resulting from insensitive or tolerant strains of fungi. Consult with your State Agricultural Experiment Station or Extension Service Specialist for guidance and ways to control any possible insensitive or tolerant strains of fungi which may occur.

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## CROP USE DIRECTIONS

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When applied according to the **SEED SHIELD BEANS RATE TABLE**, Seed Shield Beans provides early season protection against injury by aphids, bean leaf beetle, grape colaspis, leaf miners, leaf hoppers, Mexican bean beetle, seed corn maggot, threecornered alfalfa hopper, thrips, white grubs, and wireworm.

Seed Shield Beans provides protection against damping-off and seed borne rots due to *Pythium*, *Phytophthora*, *Fusarium*, *Rhizoctonia* species and early season *Phytophthora* root rot. Seed Shield Beans also suppresses seed-borne *Sclerotinia* and *Phomopsis* species.

### Legume Vegetable Group

**Bean (All *Lupinus* species)** (includes grain, sweet, white, white sweet lupin).

**Bean (All *Phaseolus* species)** (includes black bean, cranberry bean, field bean, great Northern bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, small red bean, snap bean, tepary bean, wax bean, yellow bean)

**Bean (All *Vigna* species)** (includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean)

**Broad bean (fava bean)**

**Chickpea (garbanzo bean)**

**Guar**

**Jackbean**

**Lablab bean (hyacinth bean)**

**Lentil**

**Pigeon pea**

**Soybean** (including soybean, vegetable)

**Sword bean**

### When to add additional Apron XL®:

If target fields have a history of high *Phytophthora* pressure, add additional Apron XL as directed in the rate table and the Apron XL label. The additional Apron XL may reduce compatibility with some rhizobia inoculants. Consult with the maker of rhizobia inoculants before adding the additional Apron XL.

## SEED SHIELD BEANS RATE TABLE-LEGUME VEGETABLES\*

Crop	Rate of Seed Shield Beans		Additional Apron XL	
	fl oz per 100 lb seed	grams ai per 100 kg seed	fl oz per 100 lb seed	grams ai per 100 kg seed
<b>Bean (All <i>Lupinus</i> species) including:</b> grain sweet white white sweet lupin <b>Bean (All <i>Phaseolus</i> species) including:</b> black bean cranberry bean field bean great Northern bean kidney bean lima bean navy bean pinto bean runnerbean snap bean small red bean tepary bean wax bean yellow bean (continued)	3.0 fl oz per 100 lb seed	Thiamethoxam 50  Azoxystrobin 2  Mefenoxam 3.75  Fludioxonil 2.5	0.16 - 0.48 fl oz	3.75 - 11.25 gm

### NOTE:

- Under cool conditions at planting, azoxystrobin has been documented in some geographies to delay emergence of certain varieties within the Legume Vegetable Group.
- Due to the large number of varieties within the Legume Vegetable Group, some varieties have not been evaluated for seed safety. If the Seed Shield Beans seed safety of a particular variety is unknown, a seed safety germination study should be conducted prior to applying Seed Shield Beans.
- When treated according to the directions for post-planting protection against listed pests, Seed Shield Beans will also provide protection during post treatment storage of the seed against damage from the following stored grain insects: Indian Meal Moth (*Plodia interpunctella*), Rice Weevil (*Sitophilus oryza*), Red Flour Beetle (*Tribolium castaneum*), and Lesser Grain Borer (*Rhizopertha dominica*).
- If seed to be treated has existing infestations of stored grain insects, it is recommended that the seed be fumigated prior to treating with Seed Shield Beans and bagging.

**SEED SHIELD BEANS RATE TABLE-LEGUME VEGETABLES\*** (continued)

Crop	Rate of Seed Shield Beans		Additional Apron XL	
	fl oz per 100 lb seed	grams ai per 100 kg seed	fl oz per 100 lb seed	grams ai per 100 kg seed
<b>Bean (All <i>Vigna</i> species) including:</b> adzuki bean asparagus bean blackeyed pea catjang Chinese longbean cowpea Crowder pea moth bean mung bean rice bean southern pea urd bean yardlong bean <b>Broad bean</b> (fava bean) <b>Chickpea</b> (garbanzo bean) <b>Guar</b> <b>Jackbean</b> <b>Lalab bean</b> (hyacinth bean) <b>Lentil</b> <b>Pigeon pea</b> <b>Sword bean</b>	3.0 fl oz per 100 lb seed	Thiamethoxam 50 Azoxystrobin 2 Mefenoxam 3.75 Fludioxonil 2.5	0.16 - 0.48 fl oz	3.75 - 11.25 gm

**NOTE:**

- Under cool conditions at planting, azoxystrobin has been documented in some geographies to delay emergence of certain varieties within the Legume Vegetable Group.
- Due to the large number of varieties within the Legume Vegetable Group, some varieties have not been evaluated for seed safety. If the Seed Shield Beans seed safety of a particular variety is unknown, a seed safety germination study should be conducted prior to applying Seed Shield Beans.
- When treated according to the directions for post-planting protection against listed pests, Seed Shield Beans will also provide protection during post treatment storage of the seed against damage from the following stored grain insects: Indian Meal Moth (*Plodia interpunctella*), Rice Weevil (*Sitophilus oryza*), Red Flour Beetle (*Tribolium castaneum*), and Lesser Grain Borer (*Rhizopertha dominica*).

If seed to be treated has existing infestations of stored grain insects, it is recommended that the seed be fumigated prior to treating with Seed Shield Beans and bagging.

**SEED SHIELD BEANS RATE TABLE  
SOYBEAN\***

Crop	Rate of Seed Shield Beans				Additional Apron XL	
	fl oz per 100 lb seed or fl oz per 140,000 seeds	grams ai per 100 kg seed	mg ai per seed	ml per 1,000 seeds	fl oz per 100 lb seed or gm ai per 100 kg	mg ai per seed or fl oz per 1,000 seeds or fl oz per 140,000 seeds
<b>Soybean: Including soybean, vegetable</b>	3.0 fl oz per 100 lb seed	Thiamethoxam 50	Thiamethoxam 0.0762	0.2957	0.16-0.48 fl oz per 100 lb seed	0.0057 -0.0170 mg ai per seed
	1.40 fl oz per 140,000 seeds	Azoxystrobin 2	Azoxystrobin 0.003		3.75-11.25 gm ai per 100 kg seed	0.00053-0.0016 fl oz per 1000 seeds
		Mefenoxam 3.75	Mefenoxam 0.0057		or 0.0746-0.224 fl oz per 140,000 seeds	
		Fludioxonil 2.5	Fludioxonil 0.0039			
		Total = 0.0858				

\*The mg ai per seed, ml Seed Shield Beans per 1,000 seeds and fl oz Seed Shield Beans per 140,000 seeds rates are based on 3,000 seeds per pound.

**NOTE:** When treated according to the directions for post-planting protection against listed pests, Seed Shield Beans will also provide protection during post treatment storage of the seed against damage from the following stored grain insects: Indian Meal Moth (*Plodia interpunctella*), Rice Weevil (*Sitophilus oryza*), Red Flour Beetle (*Tribolium castaneum*), and Lesser Grain Borer (*Rhizopertha dominica*).

If seed to be treated has existing infestations of stored grain insects, it is recommended that the seed be fumigated prior to treating with Seed Shield Beans and bagging.

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage, disposal, or cleaning of equipment.

### **Pesticide Storage**

Store in a cool, dry place. Storage for extended periods above 90°F is not recommended.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

### **Pesticide Disposal**

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

### **Container Handling**

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Apron XL® trademark of a Syngenta Group Company

**Seed Shield®** trademark of Helena Chemical Company

Viton® trademark of E.I. DuPont de Nemours and Company

Manufactured for:  
Helena Chemical Company  
225 Schilling Blvd., Suite 300  
Collierville, TN 38017

**SCPPL-HEL 1384A-L1A 0812**  
**4019356**

## NOTES

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## NOTES

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## NOTES

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GROUP 4A INSECTICIDE

GROUP 4 11 12 FUNGICIDES



### Insecticide with Three Fungicides

A seed treatment product for protection against damage from listed insects, seed-borne diseases, and seedling diseases on legume vegetables (including soybeans)

#### ACTIVE INGREDIENTS:

Thiamethoxam*	22.60%
Mefenoxam**	1.70%
Fludioxonil***	1.12%
Azoxystrobin****	0.90%
<b>OTHER INGREDIENTS:</b>	73.68%
<b>TOTAL:</b>	100.00%

\*CAS No. 153719-23-4

\*\*CAS No. 70630-17-0 and CAS No. 69516-34-3

\*\*\*CAS No. 131341-86-1

\*\*\*\*CAS No. 131860-33-8

One gallon of Seed Shield Beans contains 2.13 lb. thiamethoxam, 0.16 lb. mefenoxam, 0.11 lb. fludioxonil and 0.08 lb. azoxystrobin.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

#### PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

### CAUTION

Causes moderate eye irritation. Harmful if swallowed. Wash thoroughly with soap and water after handling, and before eating, drinking, chewing gum, using tobacco, or using the toilet. Avoid contact with eyes, skin, or clothing.

**ENVIRONMENTAL HAZARDS:** This product is toxic to wildlife, freshwater and estuarine/marine fish and highly toxic to aquatic invertebrates. Runoff may be hazardous to aquatic organisms in neighboring areas. Exposed treated seed may be hazardous to wildlife. Do not contaminate water when disposing of equipment wash water.

Thiamethoxam is highly toxic to bees exposed to direct treatment, and effects may be possible as a result of exposure to translocated residues in blooming crops. Thiamethoxam has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow. Mefenoxam is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

Azoxystrobin in this product can be persistent for several months or longer. Azoxystrobin degradation products and thiamethoxam have properties and characteristics similar to chemicals which are known to leach through soil to groundwater under certain conditions as a result of agricultural use. Use of these chemicals in areas where soils are permeable, particularly where the water table is shallow may result in ground water contamination.

**PHYSICAL AND CHEMICAL HAZARDS:** Do not use, pour, spill or store near heat or open flame.

NET CONTENTS: 15 gallons

## KEEP OUT OF REACH OF CHILDREN. CAUTION

See additional precautionary statements and directions for use in booklet.

#### FIRST AID

<b>IF IN EYES</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF SWALLOWED</b>	<ul style="list-style-type: none"> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF ON SKIN OR CLOTHING</b>	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF INHALED</b>	<ul style="list-style-type: none"> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

#### HOT LINE NUMBER

For 24-Hour Medical Emergency Assistance (Human or Animal)  
Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident)  
Call Chem-Trec at 1-800-424-9300.

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage, disposal, or cleaning of equipment.

**PESTICIDE STORAGE:** Store in a cool, dry place. Storage for extended periods above 90°F is not recommended.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

**CONTAINER HANDLING: Non-refillable container.** Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

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AD 080312

EPA Reg. No. 100-1384-5905  
EPA Est. 100-NE-001

Manufactured For  
**HELENA CHEMICAL COMPANY**

225 SCHILLING BOULEVARD, SUITE 300 • COLLIERVILLE, TENNESSEE 38017

PEEL BACK BOOK HERE AND RESEAL AFTER OPENING