

Agri Star[®]

By Albaugh Inc.

MACHO[®] 600 ST

Manufactured for:

ALBAUGH, INC.

1525 NE 36th Street
Ankeny, Iowa 50021

**FOR CHEMICAL SPILL, LEAK,
FIRE, OR EXPOSURE, CALL
CHEMTREC (800) 424-9300**

ACTIVE INGREDIENT:

Imidacloprid: 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine 48.7%

OTHER INGREDIENTS: 51.3%

TOTAL 100.0%

Contains 5 lbs. active per gallon (600 grams per liter).

EPA Reg. No. 42750-133

EPA Est. No. 37429-GA-002

KEEP OUT OF REACH OF CHILDREN CAUTION

**Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail).**

FIRST AID

IF SWALLOWED:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or doctor for treatment advice.
IF INHALED:	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.• Call a poison control center or doctor for further treatment advice.

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

In case of an emergency involving this product, call CHEMTREC (800) 424-9300.

See inside booklet for additional PRECAUTIONARY STATEMENTS.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if swallowed, absorbed through skin or inhaled. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

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:

1. Long-sleeved shirt and long pants,
2. Socks and shoes and
3. Chemical-resistant gloves (such as nitrile, butyl, neoprene, barrier laminate, polyvinyl chloride or Viton).

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

USER SAFETY RECOMMENDATIONS

Users should:

1. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
2. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
3. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change clothing.

ENVIRONMENTAL HAZARDS

This product is highly toxic to birds and aquatic invertebrates. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. Cover or incorporate spilled treated seeds.

DIRECTIONS FOR USE

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

For use in commercial seed treaters only, with the exception of application to canola, cotton (delinted seed), field corn, sorghum, wheat and barley, which may be made either by commercial seed treatment or as an end-use seed treatment on agricultural establishments at, or immediately before, planting. This product is to be used in liquid or slurry treaters.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Mix thoroughly before use or use entire container at one time. All tank mixes should be pre-tested to determine physical compatibility between formulations. Observe all cautions and limitations on labeling of all products used in mixtures.

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 12 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:

1. Coveralls
2. Chemical-resistant gloves (such as nitrile, butyl, neoprene, barrier laminate, polyvinyl chloride or Viton)
3. Shoes plus socks
4. Protective eyewear.

STORAGE AND DISPOSAL

PROHIBITIONS: Do not contaminate water, food or feed by storage, disposal, or by cleaning of equipment. Do not reuse empty container. Open dumping is prohibited.

PESTICIDE STORAGE: Store in a cool place. Do not store in direct sunlight. Protect from freezing temperatures.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL:

Non-refillable containers (1, 2.5, 30 & 55 gallon): Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

(Non-refillable <5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

(Non-refillable >5 gallons): 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. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows (all sizes): Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use for disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable container (250 gallon & bulk): Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

To clean the container before final disposal, empty the remaining contents from the container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing process two more times.

STORED SEED PROTECTION

To protect stored seed of crops listed on this label apply a minimum 0.8 fluid ounces of MACHO® 600 ST per 100 pounds of seed. Pest controlled by this application include Indian Meal Moth (*Plodia interpunctella*), Rice Weevil (*Sitophilus oryzae*), Red Flour Beetle (*Tribolium castaneum*), and Lesser Grain Borer (*Rhizopertha dominica*). If seed being treated is known to have existing pest infestation fumigation may be necessary prior to bagging.

EARLY SEASON PROTECTION AGAINST SUCKING INSECTS

CROP	PEST	RATE (fluid ounces per hundredweight seed)	COMMENT
Canola, Rapeseed and Mustard Seed	Aphids, Flea beetles, Wireworms	10.24 - 25.6	Use higher rate when pest populations are above historical levels.
	Lygus Bugs (including <i>Lygus spp.</i>), Seedpod Weevil larvae (including <i>Ceutorhynchus assimilis</i>)	15.36 - 25.6	Suppression only. Use higher rate when pest populations are above historical levels.
Flax, crambe, and borage	Wireworms, Seed corn maggots, Flea beetles	25.6	To provide early season protection of seedlings, apply as a commercial seed treatment.

Canola, Rapeseed and Mustard Seed (For end use application at agricultural establishments):

Shake product well before making slurry and apply using a HCBT or Batch Treater. Apply 5.1 to 12.8 fl. oz. of MACHO® 600 ST per 50 pound bag. May be diluted with an approved fungicide for disease control. Treat 1/2 of seed with 1/2 of slurry then add remainder of seed and slurry and continue mixing until all seed are covered.

CROP	PEST	RATE (fluid ounces per hundredweight seed)	COMMENT
Safflower	Wireworms	0.25 - 0.50 mg a.i./seed	To provide early season protection of seedlings, apply as a commercial seed treatment.
Sunflower	Wireworms, Seed corn maggots, Flea beetles	(One fl. oz. of MACHO® 600 ST contains 17.7g imidacloprid.)	Sunflower seed treated in California must be destined for planting in states other than California and is not to be planted in California.

Safflower, Flax, Sunflower, Crambe, and Borage (For end use application at agricultural establishments):

To provide early season protection of seedlings against wireworms, apply using HCTB or a Batch Treater at 12.8 fl. oz. per hundredweight of seed.

CROP	PEST	RATE (fluid ounces per 80,000 units of seed)	COMMENT
Field corn	Corn rootworm (including Northern, Western, Southern and Mexican) ⁽¹⁾ , Flea beetle, Chinch bug, Southern green stinkbug, White grub, Seed corn maggot, Thrips, Wireworm, Corn leaf aphid, Imported fire ant, Southern corn leaf beetle, Billbug ⁽²⁾ , Grape colaspis ⁽²⁾ , Black cutworm ⁽³⁾	6.0 (Equivalent to 1.34 milligrams a.i. per kernel)	⁽¹⁾ In areas of heavy to severe corn rootworm populations, protection will not be adequate. Use only in areas of light to moderate corn rootworm populations. Consult your State Agricultural Extension Service on levels of corn rootworm populations. ⁽²⁾ Reduces early season feeding damage. ⁽³⁾ Will reduce feeding damage caused by leaf feeding black cutworms that are 1/2 inch or less in length. ⁽⁴⁾ Reduces feeding damage during emergence and seedling stages.
	Flea beetle, Chinch bug, Seed corn maggot, Thrips, Wireworm, Corn leaf aphid Imported fire ant, Grape colaspis ⁽²⁾ , White grub	2.70 (Equivalent to 0.60 milligrams a.i. per kernel)	
	Seed corn maggot (seed protection only), Wireworm (seed protection only), Flea beetle (through 1-leaf stage), Imported fire ant, White grub ⁽⁴⁾	0.72 (Equivalent to 0.16 milligrams a.i. per kernel)	

Field Corn (For end use application at agricultural establishments):

Shake product well before making slurry and apply using a HCBT or Eight-Bag Batch Treater. May be diluted with an approved fungicide for disease control. Mix slurry so that rate is 8 – 10 fluid ounces per 50 pound bag of seed. Treat 1/2 of seed with 1/2 of slurry then add remainder of seed and slurry and continue mixing until all seed are covered. After slurry treatment, the addition of dry talc at the rate of 3/4 – 1 ounce per 50 pounds of seed is recommended to minimize risk moisture buildup in planter.

CROP	PEST	RATE (fluid ounces per hundredweight seed)	COMMENT
Wheat, Barley, Oats, Rye, Triticale	Aphids (including Bird cherry-oat, English grain, Greenbug, and Russian wheat aphid), Hessian fly	0.8 to 2.4	Reduces possible yellow dwarf virus disease from aphid vectoring. Use the higher rate to increase time of protection and/or when insect pressure is heavy.
	Wireworm	0.13 - 0.26	Suppression only. Use the higher rate to increase time of protection and/or when insect pressure is heavy.
	Grasshopper	1.2 to 2.4	Treated seed may be planted as a 50- to 60-foot border around the perimeter of the field to help minimize early season damage from grasshoppers. Consult your local agricultural extension agent for grasshopper control information specific to your area. Use the higher rate to increase time of protection and/or when insect pressure is heavy.

Wheat, Barley, Oats, Rye, Triticale (For End-Use Application at Agricultural Establishments):

Make application using a Total Slurry Treater (TST), Farmer Applied Seed Treater (F.A.S.T.), or other on-farm seed treating equipment capable of accurately applying low rates of MACHO® 600 ST. Apply 0.8 – 2.4 fl. oz. per hundredweight of seed. MACHO® 600 ST may be mixed with a fungicide product for protection against disease. MACHO® 600 ST may be applied to seed previously treated with a fungicide. In this case, dilution is necessary.

Do not graze or feed livestock on treated areas for 45 days after planting.

CROP	PEST	RATE (fluid ounces per hundredweight seed)	COMMENT
Sorghum	Aphids (including Corn leaf, English grain, Greenbug, and Yellow sugar cane aphid), Chinch bugs, Imported Fire ants, Wireworms	6.4	Thorough coverage is necessary for optimal control.

Sorghum (For End-Use Application at Agricultural Establishments):

Shake product well before making slurry and apply using a HCBT or Eight-Bag Batch Treater. May be diluted with an approved fungicide for disease control. Mix slurry so that rate is 8 – 10 fluid ounces per 50 pound bag of seed. Treat 1/2 of seed with 1/2 of slurry then add remainder of seed and slurry and continue mixing until all seed are covered. After slurry treatment, the addition of dry talc at the rate of 3/4 – 1 ounce per 50 pounds of seed is recommended to minimize risk moisture buildup in planter.

Do not graze or feed livestock on treated areas for 45 days after planting.

CROP	PEST	RATE (fluid ounces per hundredweight seed)	COMMENT
Cotton (Delinted Seed Only)	Thrips, Aphids	12.8 (Equivalent to 0.375 milligram active ingredient per seed)	Regardless of the type of application (seed treatment, soil or foliar) do not apply more than a total of 0.5 lb. of imidacloprid per acre per cropping cycle.

Cotton (Delinted Seed Only) (For End-Use Application at Agricultural Establishments):

Shake product well before making slurry and apply using a HCBT or Eight-Bag Batch Treater. May be diluted with an approved fungicide for disease control. Mix slurry so that rate is 8 – 10 fluid ounces per 50 pound bag of seed. Treat 1/2 of seed with 1/2 of slurry then add remainder of seed and slurry and continue mixing until all seed are covered.

CROP	PEST	RATE (fluid ounces per seed unit)⁽¹⁾	COMMENT
Sugar Beets (commercial seed treatment)	Whitefly, Aphids, Leafhoppers ⁽²⁾ , Root aphid, Thrips, Wireworms	2.4 - 5.0	⁽¹⁾ On a unit of pelleted sugar beet seed with a weight ratio of 2:1 pelleting mixture to raw seed (seed count 100,000 seed – approximately 1 kilogram by weight). ⁽²⁾ Including to reduce risk of spread of Curly top and Yellow mosaic virus If applying to non-pelleted raw seed, do not exceed a rate of 2.4 fluid ounces per 100,000 seed (approximately 1 Kg by weight).

CROP	PEST	RATE (fluid ounces per hundredweight seed)	COMMENT
Sweet Corn (commercial seed treatment)	Flea beetle, Early season corn leaf aphid Seed corn maggot, Wireworm	6.4	Mix slurry so that it is applied at a rate of 16 – 20 fl. oz. of diluted solution per hundredweight of seed.
	Imported fire ant, Early season corn leaf aphid, Seed corn maggot, Wireworm	3.2 – 6.4	
	Imported fire ant, Seed corn maggot (seed protection), Wireworm (seed protection)	1.6 – 3.2	
	Wireworm (seed protection)	0.8 – 1.6	
Popcorn (commercial seed treatment)	Flea beetles	6.4	

CROP	PEST	RATE (fluid ounces per hundredweight seed)	COMMENT
Soybean	Seed corn maggot, Soybean aphids, Over-wintering bean leaf beetles	1.6 – 3.2	Use higher rates to provide increased length of protection and for heavy insect pressure. Can be used as an over-treatment. Do not graze or feed livestock on soybean forage or hay.

CROP	PEST	RATE (fluid ounces per hundredweight seed)	COMMENT
Adzuki Bean, Asparagus Bean, Broad Bean (Succulent or Dry), Catjang Bean, Chinese Longbean, Field Bean, Guar Bean, Jackbean, Kidney Bean, Lablab Bean, Lima Bean (Succulent or Dry), Moth Bean (Succulent or Dry), Mung Bean, Navy Bean, Pinto Bean, Rice Bean, Runner Bean, Snap Bean, Sword Bean, Tepary Bean, Urd Bean, Wax Bean, Yardlong Bean, Blackeyed Pea (Succulent or Dry), Chickpea, Cowpea (Succulent or Dry), Crowder Pea, Dwarf Pea, Edible-Pod Pea, English Pea, Field Pea, Garden Pea, Green Pea, Pigeon Pea (Succulent or Dry), Snow Pea, Southern Pea (Succulent or Dry), Sugar Snap Pea, Grain Lupin, Sweet Lupin, White Lupin, White Sweet Lupin, Lentil*	Wireworm, Bean leaf beetle, Imported fire ant, Aphid	1.6 – 3.2	*Seed-and-pod vegetable seed treated in California must be destined for planting in states other than California and is not to be planted in California.
Carrot	Seed corn maggot, Wireworm	6.4	

ROTATIONAL CROPS

Treated areas may be replanted with any crop specified on an imidacloprid label, or any crop for which a tolerance exists for the active ingredient, as soon as practical following the last application. The following plant-back intervals should be observed for listed crops:

ROTATIONAL PLANT-BACK INTERVALS*				
IMMEDIATE PLANTBACK				30-DAY PLANTBACK
Artichoke Barley Brassica (cole) leafy vegetable Canola Cilantro Corn, Field Corn, Sweet Cotton	Cranberry Cucurbits Eggplant Ground cherry Leaf petiole vegetable Leafy vegetable Legume vegetable (succulent or dried, except soybean)	Mustard Seed Oats Okra Pepinos Pepper Popcorn Potato Rapeseed Rye Sorghum	Soybean Strawberry Sugarbeet Tomatillo Tomato Triticale Vegetable Root and Tuber Watercress Wheat	Cereals, including: Buckwheat Millet Rice Safflower
<p>*Cover crops for soil building or erosion control may be planted any time, but do not graze or harvest for food or feed. *For all other crops not listed on an Imidacloprid label, or for crops for which no tolerance for the active ingredient has been established, a 12-month plantback interval should be observed.</p>				

NOTIFICATION of the crop rotational restriction must be conveyed to the grower by appropriate seed tag labeling or bag printing on all seed units.

NOTE: The purchaser of this product is responsible for ensuring that all seed treated with this product are adequately dyed with a suitable color to prevent its accidental use as food for man or feed for animals. Refer to 21 CFR, Part 2.25. Any dye or colorant added to treated seed must be cleared for use under 40 CFR, Part 180.1001. Federal regulations have established official tolerances for certain pesticide residues. In order that residues on food and forage crops will not exceed established tolerances, use only at recommended rates.

Treated seed must not be used for or mixed with food or animal feed or processed for oil. Seed commercially treated with MACHO® 600 ST must be labeled in accordance with all applicable requirements of the Federal Seed Act.

Labels for commercially treated seed should include the following addition to the Environmental Hazards statements:

Exposed treated seed may be hazardous to birds. Dispose of all excess treated seed and seed packaging by burial away from bodies of water. Cover or incorporate spilled treated seeds.

USE RESTRICTION

Rape greens grown and harvested from MACHO® 600 ST treated seed must not be used for human and feed consumption. Rapeseed grown and harvested from treated seed is only for industrial uses and can not be used for edible oil or any other human/feed consumption.

Wheat, Barley, Oats, Rye, Triticale, Sorghum: Do not graze or feed livestock on treated areas for 45 days after planting.

Cotton (delinted seed only): Regardless of the type of application (seed treatment, soil or foliar) do not apply more than a total of 0.5 lb. of imidacloprid per acre per cropping cycle.

CONDITIONS OF SALE AND LIMITED WARRANTY STATEMENT

Treatment of highly mechanically damaged seed, or seed of known low vigor and poor quality, may result in reduced germination and/or reduction of seed and seedling vigor. Treat and conduct germination tests on a small portion of seed before committing the total seed lot to a selected chemical treatment. Due to seed quality conditions beyond the control of Albaugh, no claims are made to guarantee germination of carry-over seed.

As its sole express warranty, Albaugh warrants that this product conforms to the chemical description on the label and is reasonably fit for purposes stated on the label only when used in accordance with directions and instructions specified on the label, subject to the inherent risks set forth above. **ONLY AS PERMITTED BY APPLICABLE LAW, IN THE EVENT OF A BREACH OF THIS LIMITED WARRANTY, ALBAUGH SHALL NOT BE LIABLE FOR CONSEQUENTIAL DAMAGES. SUBJECT TO APPLICABLE LAW, ALBAUGH NEITHER MAKES NOR AUTHORIZES ANY OF ITS AGENTS OR REPRESENTATIVES TO MAKE ANY WARRANTY OF FITNESS OR MERCHANTABILITY, GUARANTY OR REPRESENTATION, EXPRESS OR IMPLIED, CONCERNING THIS MATERIAL.** Buyer assumes the responsibility to handle, use, and store this product in accordance with safety instructions and use directions contained on the label.

Buyer/User purchases this product subject to the foregoing Conditions of Sale and Limited Warranty which, subject to applicable law, may be varied only by a written agreement signed by a duly authorized representative of Albaugh. If these terms are not acceptable, return all products to the place of purchase, unopened for a full refund.

MACHO® 600 ST is a registered trademark of Albaugh, Inc.