



**SPECIMEN
LABEL**

GROUP 4 HERBICIDE

MCPA ESTER 500

LIQUID HERBICIDE

AGRICULTURAL

READ THE LABEL AND ATTACHED LEAFLET BEFORE USING
GUARANTEE: MCPA (present as the 2-ethylhexyl ester) 500 g a.e./L
REGISTRATION NO. 27860 *PEST CONTROL PRODUCTS ACT*

CAUTION



POISON

**DANGER – CORROSIVE TO EYES
SKIN IRRITANT
POTENTIAL SKIN SENSITIZER**

Albaugh, Inc.

1525 NE 36th Street • Ankeny, Iowa USA 50021

DIRECTIONS FOR USE

Grazing Restrictions

- Do not permit lactating dairy animals to graze fields within 7 days after application.
- Do not harvest forage or cut hay within 7 days after application.
- Withdraw meat animals from treated fields at least 3 days before slaughter.

USE PRECAUTIONS

- Do not overspray non-target terrestrial or aquatic habitats. These include: grassland, forested areas, shelter belts, woodlots, hedgerows, pastures, rangelands, and shrublands, lakes, rivers, sloughs, ponds, coulees, prairie potholes, creeks, marshes, streams, reservoirs, wetlands and estuarine/marine habitats. Avoid drifting of spray onto any body of water or other non-target areas.
- Coarse sprays are less likely to drift; therefore, avoid combinations of pressure and nozzle type that will result in fine particles (mist). Do not apply when wind velocity and direction pose a risk of spray drift. Use caution when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelterbelt) or aquatic habitat.
- Do not spray on exceptionally hot days over 27°C.
- Clean spray equipment thoroughly after use and rinse with clean water. Do not use spray equipment to apply other pesticides to crops sensitive to this product. Do not reuse empty containers.

To Prepare a Spray

Add half the required amount of water or oil to the spray tank, then add with agitation the required amount of the product as shown for the different uses, and finally the balance of the water or oil with continued agitation. Provide agitation to ensure uniformity of spray mixture.

Product Specific Precautions

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-800-247-8013 or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following:

CROP USE

Ground Application

Use 100–240 L of water per hectare for ground application unless otherwise specified on tank-mix product labels. Do not exceed 275 kPa pressure for ground application. Do not spray in winds exceeding 25 km per hour.

During mixing, loading, application, clean-up and repair activities, wear coveralls over a long-sleeved shirt, long pants, socks, shoes and chemical-resistant gloves. In addition, when mixing/loading, wear goggles or faceshield. Aerial applicators and applicators using a closed cab are not required to wear chemical-resistant gloves.

Re-entry is not permitted until 12 hours after application for all agricultural scenarios.

Field sprayer application: DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) coarse classification. Boom height must be 60 cm or less above the crop or ground.

Aerial Application (including fixed and rotary wing aircraft)

Apply only by fixed-wing or rotary aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label.

Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

Apply a minimum of 30 L of spray solution per hectare depending on the type of application system being used. Use boom pressures of 235 kPa or less. Avoid placing nozzles where spray will enter wing tip vortices. Do not spray in winds exceeding 16 km per hour.

Aerial Use Precautions

Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application as outlined in the *National Aerial Pesticide Application Manual*, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides.

DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply when wind speed is greater than 16 km/h at flying height at the site of application. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) coarse classification. To reduce drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length MUST NOT exceed 65% of the wingspan or rotorspan.

Do not apply to any body of water. Avoid drifting of spray onto any body of water or other non-target areas.

Aerial Operator Precautions

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted.

It is desirable that the pilot have communication capabilities at each treatment site at the time of application.

Aerial applicators must wear long pants and a long-sleeved shirt. Mixers/loaders must wear coveralls over a long-sleeved shirt, long pants, socks, shoes, chemical-resistant gloves, and goggles or faceshield during mixing, loading, clean-up and repair activities. Aircraft must be closed cab. Mixer/loader and applicator must be different individuals. No human flaggers permitted.

Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label. All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

DO NOT APPLY MORE THAN ONCE PER GROWING SEASON.

Surface runoff

To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to, heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g., soils that are compacted, fine-textured, or low in organic matter such as clay).

Avoid applying this product when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip (buffer zone) between the treated area and the edge of the water body.

Leaching

The use of this chemical may result in contamination of groundwater particularly in areas where soils are permeable (e.g., sand, loamy sand and sandy loam soils) and/or the depth to the water table is shallow.

Uses

Crop: WHEAT, BARLEY, RYE

Treatment Stage: For ground or aerial application. Treat from the 4th leaf to just before the flag leaf (shot blade) stage.

NOTE: Do not treat cereals underseeded to legumes.

NOTE: Rates over 1.1 L/ha may cause crop injury.

Crop: OATS AND MIXED GRAIN

Treatment Stage: For ground or aerial application. Spray from 1- to 4-leaf stage.

NOTE: Rates over 1.1 L/ha may cause crop injury.

Crop: FLAX (excluding low-linolenic acid varieties)

Treatment Stage: For ground application ONLY.

Spray after plant reaches 5 cm in height and before the bud stage.

NOTE: Rates over 0.85 L/ha may cause crop injury. Maximum application rate for flax is 1.1 L/ha.

Susceptible Weeds: Burdock, Cocklebur, Mustards (except Dog Mustard), Ragweed, Flixweed*, Kochia, Lamb's-Quarters, Russian Pigweed, Shepherd's Purse, Stinkweed, Volunteer Canola.

*Flixweed susceptible only at seedling stage. Use rates for harder-to-kill weeds to kill fall-germinated flixweed in the spring.

Rates to Use on Susceptible Weeds:

Small seedlings, good growing conditions:	0.7 L/ha
Weeds in bud, dry or cool weather or heavy infestation:	1.1 L/ha

Harder-to-Kill Weeds: Annual Sow-thistle, Bluebur, Blue Lettuce*, Canada Thistle*, Peppergrass, Curled Dock, Dog Mustard, Goosefoot, Hemp-nettle (suppression only), Redroot Pigweed, Russian Thistle*, Perennial Sow-Thistle*, Leafy Spurge*.

*Top growth control only.

Rates to Use on Harder-to-Kill Weeds:

Small Seedlings growing rapidly, good growing conditions:	1.25 L/ha
Weeds in bud, dry or cool conditions or heavy infestation:	1.75 L/ha

TANK MIXES WITH Agri Star MCPA Ester 500

Use tank mixes only when they are registered and recommended. Read and follow the directions, warnings, precautions and grazing limitations on both products used in a tank mix. Ensure all components of tank-mix are registered for aerial application. Consult the labels of the tank-mix partners and observe the largest buffer zone (if specified) of the products involved in the tank mixture.

Do not exceed the application rates given on the label for each product.

TANK MIXES:

AgriStar MCPA Ester 500 + Avenge® 200-C

Crop: Spring and Winter Wheat (See Avenge® 200-C label for specific variety limitations), and barley.

Treatment Stage: Apply at the 3- to 5-leaf stage of wild oats.

Susceptible Weeds: Wild Oats and Broadleaf Weeds – susceptible to MCPA

Rates to Use:

AgriStar MCPA Ester 500	1.1 L/ha
+ Avenge 200-C	3.5–4.25 L/ha

Apply this mixture in 100 Litres of water per hectare.

MIXING AND APPLICATION INSTRUCTIONS

1. Fill tank 1/2 full with water. Start agitation.
2. Add Agri Star MCPA Ester 500. When Avenge® is used, add after Agri Star MCPA Ester 500 when tank is 3/4 full.
3. Complete filling of tank with water while maintaining continuous agitation.
4. Use 100–240 litres of water per hectare for ground application unless otherwise specified on tank-mix product labels.
5. Do not exceed 275 kPa pressure for ground application.

Buffer Zones to Protect Sensitive Habitat

Use of the following spray methods or equipment DO NOT require a buffer zone: handheld or backpack sprayer and spot treatment.

The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelterbelts, woodlots, hedgerows, riparian areas and shrublands), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

When a tank mixture is used, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture.

Method of Application	Crop	Buffer Zones (metres) Required for the Protection of:					
		Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:		Terrestrial Habitat	
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m		
Field sprayer*	Cereals, flax	1	1	1	1	4	
Aerial	Terrestrial Food and Feed Crops						
	Cereals, flax	Fixed wing	1	0	1	0	60
		Rotary wing	1	0	1	0	50

*For field sprayer application, buffer zones can be reduced with the use of drift-reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy, the labelled buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with cone-shaped shields that are no more than 30 cm above the crop canopy, the labelled buffer zone can be reduced by 30%.

RESISTANCE-MANAGEMENT RECOMMENDATIONS

Resistance-Management Recommendations

For resistance management, AgriStar MCPA Ester 500 is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to AgriStar MCPA Ester 500 and other Group 4 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field.

Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance:

- Where possible, rotate the use of AgriStar MCPA Ester 500 or other Group 4 herbicides with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group when such use is permitted.
- Herbicide use should be based on an IPM program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical), cultural, biological and other chemical control practices.
- Monitor treated weed populations for resistance development.
- Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment and planting clean seed.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.

For further information and to report suspected resistance, contact Albaugh, Inc. representatives at 1-800-247-8013.

PRECAUTIONS

Harmful if swallowed. CORROSIVE to the eyes. Causes skin irritation. DO NOT get in eyes, on skin, or on clothing. Potential skin sensitizer.

During mixing, loading, application, clean-up and repair activities, wear coveralls over a long-sleeved shirt, long pants, socks, shoes and chemical-resistant gloves. In addition, when mixing/loading, wear goggles or face shield. Aerial applicators and applicators using a closed cab are not required to wear chemical-resistant gloves.

Re-entry is not permitted until 12 hours after application for all agricultural scenarios.

Wash thoroughly after handling. Wash contaminated clothing before reuse. Destroy contaminated shoes and leather articles.

Do not use in residential areas, which are defined as sites where bystanders may be present during or after spraying, including homes, schools, parks, playgrounds, playing fields and public buildings.

1. KEEP OUT OF THE REACH OF CHILDREN.
2. Avoid contact with eyes, skin and clothing. May cause skin irritation.
3. Do not breathe spray mist or vapours. Avoid spray or vapour drifts onto susceptible plants such as grapes, tomatoes, tobacco, sugar beets, sunflowers, beans, turnips, cauliflower, cabbage, alfalfa, clover, peas, potatoes, ornamental trees, shrubs or flowers, fruit trees, lawns, most vegetable crops or other desirable vegetation.
4. Do not use in a greenhouse.
5. Keep in original container during storage.

(continued)

6. Do not store near seeds, feeds, fertilizers or pesticides used on crops sensitive to this product.
7. Keep away from fire or open flame and other sources of heat.
8. Never wear contact lenses while working with this material.
9. Avoid contamination of food.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's web site at: www.croplife.ca.

ENVIRONMENTAL HAZARDS

This product contains a petroleum distillate which is moderately to highly toxic to aquatic organisms. Avoid contamination of aquatic systems during application. Do not contaminate these systems through direct application, disposal of waste or cleaning equipment.

This product is also toxic to non-terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

FIRST AID

IF SWALLOWED: Call a poison control centre or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give **any** liquid to the person. Do not give anything by mouth to an unconscious person.

IF ON SKIN/CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.

IF IN EYES: Hold eyes open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control centre or doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for treatment advice.

Take the container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION

No specific antidote. Treatment should be based on judgement of the physician in response to reactions of the patient. Contains petroleum distillates at greater than 10%. DO NOT induce vomiting. Vomiting may cause aspiration pneumonia.

High concentrations of MCPA may cause severe irritation to the eyes. Symptoms of overexposure to MCPA could include slurred speech, twitching, jerking and spasms, drooling, low blood pressure and unconsciousness. Treat symptomatically.

DISPOSAL

For Recyclable Containers:

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site.

Contact your local distributor/dealer or municipality for the location of the nearest collection site.

Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

For Returnable Containers:

Do not reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

For Returnable-Refillable Containers:

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

NOTICE TO USER: This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

08-3817