Container label

**Bison 400L™**

Suspension concentrate

**AGRICULTURAL**

A SUSPENSION CONCENTRATE HERBICIDE FOR POST EMERGENCE CONTROL OF ANNUAL GRASSES IN SMALL GRAIN CEREALS AND IN SELECTED FORAGE GRASSES GROWN FOR SEED ONLY.

**GUARANTEE:**

Tralkoxydim............................................ 400 grams per litre

Contains 1,2-benzisothiazolin-3-one at 0.041 % as a preservative.

READ THE LABEL AND ATTACHED BROCHURE BEFORE USING

REGISTRATION NO. 29256
PEST CONTROL PRODUCTS ACT

NET CONTENTS: 4 - 1 050 litres, Bulk

**ADAMA Agricultural Solutions Canada Ltd.**
300 – 191 Lombard Avenue
Winnipeg, Manitoba
R3B 0X1-855-264-6262

For emergency medical help and health/safety inquires call ProPharma at 1-877-250-9291 (24 hours a day)
For spill, leak or fire call INFOTRAC at 1-800-535-5053 (24 hours a day)
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.

FIRST AID

**If swallowed**
Call a poison control centre 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 centre or doctor. Do not give anything by mouth to an unconscious person.

**If on skin or 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 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 further treatment advice.

**If in eyes**
Hold eye 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 eye. Call a poison control centre or doctor for treatment advice.

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

TOXICOLOGICAL INFORMATION
Treat symptomatically for ingestion and/or skin and eye contact. Symptoms are likely to be those of CNS depression. Avoid respiratory depressants unless otherwise indicated.

PRECAUTIONS

**KEEP OUT OF REACH OF CHILDREN.**
Do not wear contact lenses when using chemicals. Do not smoke, eat, or drink while using this product. Workers must wear coveralls over long-sleeved shirt, long pants, safety goggles, boots, and chemical resistant gloves when mixing, loading, and during clean up or when adjusting or repairing sprayer. Applicators must wear long-sleeved shirt, long pants. Wash gloves thoroughly with water before removing them during any operation. Wash hands thoroughly with soap and water after using the product and before eating, drinking or smoking. Do not contaminate food, water supplies or animal feed.

For all uses, **DO NOT** enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.
ENVIRONMENTAL HAZARDS:
TOXIC to non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

To reduce runoff from treated areas into aquatic habitats, avoid application to areas with a moderate to steep slope, compacted soil, or clay. Avoid application of the product when heavy rain is forecast. Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

STORAGE

Store in a cool, dry place, away from children, animals, food, feed or fertilizers. Keep unused product in resealed original container. Store above –5°C. Shake well before use.

SPILL CLEANUP

Wear appropriate protective equipment (gloves, glasses, apron) when attempting to clean up the spill. If the container is leaking, secure leak and place the container into a drum or heavy gauge plastic bag.

For spills and leaks - contain the liquid with dikes of inert material (soil, clay, kitty litter etc.). Absorb the spill onto inert material and shovel into a sealable waste container.
On hard surfaces - sprinkle spill area with detergent and scrub in a small quantity of water with a coarse broom. Let stand 10 minutes then absorb onto an inert material and shovel into the waste container.
On soil - remove the top 15 cm of soil in the spill area and replace with fresh soil. Dispose of all waste including scrub brush in accordance with provincial requirements. Contact the manufacturer and the provincial regulatory agency in case of a spill and for clean-up of spills.

DISPOSAL OF UNUSED, UNWANTED PRODUCT

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.
CONTAINER 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 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.
GROUP 1 HERBICIDE

Bison 400L™

Suspension concentrate

AGRICULTURAL

A SUSPENSION CONCENTRATE HERBICIDE FOR POST EMERGENCE CONTROL OF ANNUAL GRASSES IN SMALL GRAIN CEREALS AND IN SELECTED FORAGE GRASSES GROWN FOR SEED ONLY.

GUARANTEE:
Tralkoxydim............................................ 400 grams per litre

Contains 1,2-benzisothiazolin-3-one at 0.041 % as a preservative.

READ THE LABEL AND ATTACHED BROCHURE BEFORE USING

REGISTRATION NO. 29256
PEST CONTROL PRODUCTS ACT

NET CONTENTS: 4 - 1 050 litres, Bulk

ADAMA Agricultural Solutions Canada Ltd.
300 – 191 Lombard Avenue
Winnipeg, Manitoba
R3B 0X1-855-264-6262

For emergency medical help and health/safety inquires call ProPharma at 1-877-250-9291 (24 hours a day)
For spill, leak or fire call INFOTRAC at 1-800-535-5053 (24 hours a day)
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.

FIRST AID

If swallowed
Call a poison control centre 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 centre or doctor. Do not give anything by mouth to an unconscious person.

If on skin or 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 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 further treatment advice.

If in eyes
Hold eye 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 eye. Call a poison control centre or doctor for treatment advice.

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

TOXICOLOGICAL INFORMATION
Treat symptomatically for ingestion and/or skin and eye contact. Symptoms are likely to be those of CNS depression. Avoid respiratory depressants unless otherwise indicated.

PRECAUTIONS
KEEP OUT OF REACH OF CHILDREN.
Do not wear contact lenses when using chemicals. Do not smoke, eat, or drink while using this product. Workers must wear coveralls over long-sleeved shirt, long pants, safety goggles, boots and chemical resistant gloves when mixing, loading, and during clean up or when adjusting or repairing sprayer. Applicators must wear long-sleeved shirt, long pants. Wash gloves thoroughly with water before removing them during any operation. Wash hands thoroughly with soap and water after using the product and before eating, drinking or smoking. Do not contaminate food, water supplies or animal feed.

For all uses, DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.
ENVIRONMENTAL HAZARDS:
TOXIC to non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

To reduce runoff from treated areas into aquatic habitats, avoid application to areas with a moderate to steep slope, compacted soil, or clay. Avoid application of the product when heavy rain is forecast. Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

STORAGE

Store in a cool, dry place, away from children, animals, food, feed or fertilizers. Keep unused product in resealed original container. Store above –5°C. Shake well before use.

SPILL CLEANUP

Wear appropriate protective equipment (gloves, glasses, apron) when attempting to clean up the spill. If the container is leaking, secure leak and place the container into a drum or heavy gauge plastic bag.

For spills and leaks - contain the liquid with dikes of inert material (soil, clay, kitty litter etc.). Absorb the spill onto inert material and shovel into a sealable waste container. On hard surfaces - sprinkle spill area with detergent and scrub in a small quantity of water with a coarse broom. Let stand 10 minutes then absorb onto an inert material and shovel into the waste container. On soil - remove the top 15 cm of soil in the spill area and replace with fresh soil. Dispose of all waste including scrub brush in accordance with provincial requirements. Contact the manufacturer and the provincial regulatory agency in case of a spill and for clean-up of spills.

DISPOSAL OF UNUSED, UNWANTED PRODUCT

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.
CONTAINER 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 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.
PRODUCT INFORMATION

Bison 400L™ is a systemic, postemergence herbicide for the selective control of wild oats, volunteer tame oats, green foxtail, yellow foxtail, barnyard grass and Persian Darnel in spring wheat, durum wheat, winter wheat, barley, triticale, spring rye, winter rye, and selected forage grasses (except timothy) grown for seed only.

DIRECTIONS FOR USE

Only one application per season is permitted.

Apply only when the potential for drift to areas of human habitation or human activity such as houses, cottages, schools and recreational areas is minimal. Take into consideration wind speed, wind direction, temperature, application equipment and sprayer settings.

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 ASAE medium classification. Boom height must be 60 cm or less above the crop or ground.

AERIAL APPLICATION:
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) medium classification. To reduce drift caused by turbulent wingtip vortices, the nozzle distributions along the spray boom length MUST NOT exceed 65% of the wingspan or rotorspan.

Buffer zones:
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, shelter belts, woodlots, hedgerows, rangelands, riparian areas and shrublands),

<table>
<thead>
<tr>
<th>Method of Application</th>
<th>Buffer Zones (metres) Required for the Protection of:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Terrestrial Habitat</td>
</tr>
<tr>
<td>Field Sprayer*</td>
<td>3</td>
</tr>
<tr>
<td>Aerial (fixed wing)</td>
<td>100</td>
</tr>
<tr>
<td>Aerial (rotary wing)</td>
<td>80</td>
</tr>
</tbody>
</table>

*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%.

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.
RATE OF USE: Apply Bison 400L™ at 0.5 L/ha in 50-100 L/ha of water.

Note: Always add ADDIT ADJUVANT to the spray solution at a rate of 0.5 L per 100 L of water (0.5% v/v). The incorrect ADDIT ADJUVANT rate can result in unacceptable weed control or crop injury.

See MIXING and SPRAYING INSTRUCTION sections.

Bison 400L™ can be used on the following crops:

CEREAL CROPS: (Spring Wheat, Durum Wheat, Winter Wheat, Barley, Triticale, Spring Rye and Winter Rye) Bison 400L™ can be used in all varieties of spring wheat (including Canada Western red spring, amber durum, soft white spring, extra strong and Canada prairie spring), red winter wheat, all 2 or 6 row varieties of barley (malting and feed varieties), all varieties of triticale, spring rye and winter rye.

Note: Tillered cereal crops may incur injury if applications are made within 48 hours of freezing temperatures. Non-tillering cereal crops which are exposed to temperatures of 4°C or less up to 48 hours before or after application may incur injury. Tank mixing Bison 400L™ with a broadleaf weed herbicide under adverse conditions may increase severity of crop injury. Crops under stress from foliar diseases or low fertility are more susceptible to injury from Bison 400L™.

Early crop injury may be observed, but yield should not be reduced.
Do not use in tame oat crops. Avoid drift onto tame oat and corn crops.
Do not replant treated areas to tame oats or corn for at least 4 weeks after application.

In Eastern Canada Bison 400L™ is to be used only for the control of wild oats in spring wheat, winter wheat, durum wheat, barley and all varieties of triticale and spring and winter rye.

MINIMUM INTERVAL TO HARVEST: Immature cereal crops may be grazed or cut for hay 16 days after treatment. Grain may be harvested 60 days after treatment. Mature straw may be fed to livestock. Do not feed or graze underseeded forage crops in the year of treatment, sufficient data are not available to support this use.

CEREAL CROPS UNDERSEEDED TO FORAGE LEGUMES: alfalfa, birdsfoot trefoil, sainfoin and clovers.

Note: Do not tankmix Bison 400L™ with any broadleaf herbicides when applying to cereal crops underseeded to forage legumes, as the forages may be injured or killed.

WEEDS CONTROLLED: Apply Bison 400L™ to actively growing weeds for best results. Weeds emerging after application of Bison 400L™ will not be controlled.

<table>
<thead>
<tr>
<th>CROP</th>
<th>WEEDS CONTROLLED</th>
<th>WEED GROWTH STAGE (ZADOKS or BBCH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHEAT</td>
<td>WILD OATS, VOLUNTEER OATS</td>
<td>1-6 leaf (11,20 to 14,22)</td>
</tr>
</tbody>
</table>
Optimum weed control and crop yield response occurs when grassy weeds are removed before they begin to tiller. Refer to the illustration.

**WEED LEAF STAGES**

<table>
<thead>
<tr>
<th>ONE LEAF</th>
<th>TWOLEAF</th>
<th>THREELEAF</th>
<th>FOUR LEAF</th>
<th>FIVE LEAF (1 TILLER)</th>
<th>SIXLEAF (2 TILLERS)</th>
<th>SEVENLEAF (3 TILLERS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1, 2</td>
<td>1, 2</td>
<td>1, 2</td>
<td>1, 2, 4</td>
<td>1, 2, 4</td>
<td>1, 2, 4</td>
</tr>
</tbody>
</table>

Optimum control - Wild Oats, Volunteer Tame Oats, Green & Yellow Foxtail and Persian Darnel
Perennial Darnel and Barnyard Grass - Controlled
Green and Yellow Foxtail - Controlled
Wild Oats & Volunteer Tame Oats - Controlled

Perennial grasses such as quack grass will not be controlled.

Susceptible grassy weeds treated with Bison 400L™ cease growth soon after application, however, complete die-back of the weeds could take up to 2 weeks.
When grass weeds are stressed due to drought, heat, lack of fertility, flooding or prolonged cool temperatures, control can be reduced or delayed since the grasses are not actively growing. Grass escapes or re-tillering may occur when application is made under prolonged stress conditions. Optimum weed control will be obtained if application of Bison 400L™ is delayed until the stress conditions have ended and weeds are once again actively growing.

The herbicidal activity of Bison 400L™ can be negatively affected if water containing high concentrations (>400 ppm) of bicarbonate ions is used as a diluent. Water from deep wells is more likely to contain high concentrations of bicarbonate ions. Ammonium sulfate at 9 to 18 kg per 1000 litres of spray solution, can be used to counteract this antagonistic effect. Use only granular or liquid ammonium sulfate formulations which do not contain additional wetters or surfactants.

Bison 400L™ is not affected by rain falling one hour or more after application.

**TANK MIXES OF BISON 400L™ WITH BROADLEAF WEED HERBICIDES:**
Bison 400L™ alone will not control broadleaf weeds. For broad spectrum control of both annual grasses and broadleaf weeds, Bison 400L™ can be tank mixed with a variety of broadleaf weed herbicides. Refer to the following table for details and additional guidance. Read the appropriate broadleaf herbicide label for information on broadleaf weeds controlled.
Tank Mixing Notes:

Read and strictly adhere to the use directions and precautions on the label of the product(s) that is/are being tank mixed with Bison 400L™. Also note all environmental restrictions and guidance such as rain fastness and maximum spraying temperatures on the label of the other product(s) being tank mixed.

Do not tank mix with amine formulations of 2,4-D or with amine formulations of MCPA or with any other herbicide, insecticide, fungicide, fertilizer solution or adjuvant not recommended on the label as poor grass control and/or unacceptable crop injury may result.

With reduced water volumes, tank mixes with Badge, Logic M, Buctril M, Mextrol 450, Thresher Thumper, Leader, Bromotril 240 EC, Brotex or Pardner may result in some initial injury in the form of "tip burn". This injury, however, will not have any adverse effect on crop maturity or yield.

Do not tank mix Bison 400L™ with broadleaf herbicides when applying to cereal crops underseeded to forage legumes as the forages may be injured or killed.

Tank mixes with ATTAIN† or PRESTIGE† may cause temporary crop injury if applied before the 4-leaf stage, however, yield will not normally be affected. These tank mixes may provide a lower level of wild oat control than Bison 400L™ alone.

Temporary crop injury may occur with registered tank mixes, in particular 2,4-D Ester/dichlorprop products, under extreme weather conditions or when the crop is suffering from stress due to inadequate or abnormally high moisture levels, or extreme temperatures.

Barley may be injured with tank mixes of 2,4-D Ester/dichlorprop and Badge plus MCPA.

Herbicides not listed on this label for tank mixing with Bison 400L™ may be applied separately in sequence. Always apply Bison 400L™ first and allow at least 7 days after the application of Bison 400L™ before applying the other herbicide. Herbicides labelled for tank mixing with Bison 400L™ may also be applied sequentially, either before or after application of Bison 400L™.

TANK MIXES OF BISON 400L™ WITH INSECTICIDES:
Bison 400L™ alone or in combination with LOGIC M, BADGE, BUCTRIL M, MEXTROL 450, BROTEX 240, BROMOTRIL, PARDNER or KORIL can be tank mixed with MATADOR® 120EC Emulsifiable Concentrate Insecticide or DECIS† Flowable for one pass weed and insect control. Always add MATADOR 120EC Emulsifiable Concentrate Insecticide or DECIS Flowable to the spray tank after the herbicides but before adding TRALKOXYDIM ADJUVANT.
FOR ALL TANK MIXES, USE 0.5 litres Bison 400L™ per hectare PLUS THE FOLLOWING:

<table>
<thead>
<tr>
<th>MIXING PARTNER</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Badge, Mextrol 450, Logic M, Buctril M</td>
<td>Additional MCPA Ester may be added to these tank mixes to improve control of certain broadleaf weeds (i.e. hemp nettle, volunteer canola). Refer to the Bromoxynil labels for recommended MCPA Ester rates. A reduction in control of green foxtail may occur with the tank mixes of Bromoxynil and additional MCPA Ester. Maximum rate of Buctril M is 1 L/ha. Maximum rate of Logic M/Badge/Mextrol 450 is 1.25 L/ha.</td>
</tr>
<tr>
<td>ATTAIN</td>
<td>Do not apply prior to the 4 leaf stage of the crop as temporary crop injury could occur, particularly in spray overlaps. Attain A 0.6 L/ha + Attain B 1.0 L/ha rates.</td>
</tr>
<tr>
<td>Bromotril 240 EC, Brotex, Pardner, Koril</td>
<td>Maximum rate of Brotex/Bromotril/Koril is 1.2 L/ha. Maximum rate of Pardner is 1 L/ha.</td>
</tr>
<tr>
<td>Thrasher, Leader, Thumper, Approve</td>
<td>Maximum rate of Leader/Thrasher/Approve is 1.25 L/ha. Maximum rate of Thumper is 1 L/ha.</td>
</tr>
<tr>
<td>Dichlorprop/2,4-D Ester</td>
<td>Maximum rate of 1.75 L/ha (assuming 600 g/L dichlorprop/2,4-D Ester). To ensure optimum crop safety, do not apply prior to the 4 leaf stage of the crop as per the dichlorprop/2,4-D Ester label timing.</td>
</tr>
<tr>
<td>2,4-D Ester</td>
<td>Maximum rate of 0.9 L/ha (assuming 600 g/L 2,4-D). Do not apply prior to the 4 leaf stage of the crop as temporary crop injury could occur, particularly in spray overlaps.</td>
</tr>
<tr>
<td>MCPA Ester</td>
<td>Maximum rate of 1.12 L/ha (assuming 500 g/L MCPA).</td>
</tr>
<tr>
<td>LONTREL™ + MCPA Ester</td>
<td>Maximum rate of 0.28 L/ha + 1.12 L/ha (assuming 500 g/L MCPA). Apply between 3 leaf expanded to before flag leaf of the crop. DO NOT apply after 6 leaf stage of the crop.</td>
</tr>
<tr>
<td>CURTAIL M™</td>
<td>Apply between 3 leaf expanded to before flag leaf of the crop. DO NOT apply after 6 leaf stage of the crop. Maximum rate of 2 L/ha.</td>
</tr>
<tr>
<td>PRESTIGE</td>
<td>For use on spring barley, durum wheat and spring wheat only. Apply postemergence when weeds are in the seedling stage (2- to 4-leaf) and when spring wheat and spring barley are in the 3-leaf to just before the flag-leaf emergence stage. Do not apply later than the flag-leaf emergence stage. Prestige A 0.8 L/ha + Prestige B 2.0 L/ha rates. DO NOT APPLY BY AIR.</td>
</tr>
<tr>
<td>Badge, Logic M, Mextrol 450 Buctril M</td>
<td>1.25 L/ha for use on spring wheat, durum and barley only. 1.0 L/ha for use on spring wheat, durum and barley only.</td>
</tr>
<tr>
<td>DECIS Flowable Insecticide</td>
<td>Maximum rate of 120 mL/ha.</td>
</tr>
<tr>
<td>Trophy Herbicide Tank Mix</td>
<td>Apply post-emergence when weeds are in the seedling stage (2-4 leaf) and when spring wheat, durum wheat and spring barley are in the 3-leaf to flag-leaf stage. Do not apply later than the flag-leaf stage. Trophy A Emulsifiable Concentrate Herbicide 0.6 L/ha + Trophy B Emulsifiable Concentrate Herbicide 1.12 L/ha rates. DO NOT APPLY BY AIR</td>
</tr>
</tbody>
</table>
MEXTROL 400M Liquid Herbicide
1.4 L/ha for use on spring wheat, durum and barley only

MATADOR 120EC Emulsifiable Concentrate Insecticide
Apply 63-83 mL/ha for control of grasshoppers.

STARANE † Herbicide
Apply 0.4 L/ha for control of cleavers (1-4 whorls). Apply 0.6 L/ha for control of cleavers (1-4 whorls), kochia (2-8 leaf), volunteer flax (1-12 cm) and suppression of stork’s bill (1-8 leaf). Apply 0.8 L/ha for control/suppression of aforementioned weeds plus control of round-leaved mallow (1-6 leaf), and suppression of chickweed (up to 8 cm), hempnettle (2-6 leaf) and wild buckwheat (1-4 leaf).

MIXING INSTRUCTIONS:
Follow the mixing instructions below for adding Bison 400L™ to the spray tank.

1. Only use sprayers in good running condition with high agitation. Ensure the sprayer and pre-mix tank is cleaned according to instructions on label of the product used prior to Bison 400L™. Use only clean water for the spray solution. Ensure that all inline strainer and nozzle screens in the sprayer are 50 mesh or coarser. Screens of 80 mesh size or finer should not be used.
2. Begin to fill sprayer tank or premix tank with clean water, and engage agitator. Agitation must be continued throughout the entire mixing and spraying procedure.
3. When the sprayer or premix tank is three quarters full of water, add Bison 400L™. If more than 1 case of Bison 400L™ is to be used, add the Bison 400L™ from all cases prior to adding tank mixed products or ADDIT ADJUVANT.
4. If tank mixing, add the recommended product(s) next.
5. Lastly, add ADDIT ADJUVANT, and then continue to fill tank to desired level with water.

GROUND SPRAYING INSTRUCTIONS:

1. Apply in a spray volume of 50-100 L/ha at a pressure of 275 kPa to ensure proper dispersion, spraying characteristics and performance of Bison 400L™
2. Flat fan nozzles of 80° or 110° are recommended for optimum coverage. Do not use floodjet nozzles or controlled droplet application equipment. Nozzles may be angled forward 45° to enhance penetration of the crop and provide better coverage. Ensure that all in-line strainer and nozzle screens in the sprayer are 50 mesh or coarser. Screens of 80 mesh or finer should not be used.
3. Always ensure that agitation is continued until spraying is completed, even if stopped for brief periods of time. If the agitation is stopped for more than 5 minutes, re-suspend the spray solution by running on full agitation prior to spraying. Do not begin spraying until fully re-suspended. Bison 400L™ must be sprayed within the same day of mixing.
4. When spraying is completed and prior to using other products, ensure the sprayer tank is thoroughly rinsed with clean water to remove any remaining Bison 400L™ residues. Using a pressure washer and the addition of a detergent or AGRAL® 90 to the rinse water will enhance removal of residues.
**AERIAL APPLICATION**

**Generic Aerial Application Label Instructions - Directions for Use**

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.

**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 to any body of water. Avoid drifting of spray onto any body of water or other non-target areas. Specified buffer zones should be observed.

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 during periods of dead calm or when wind velocity and direction pose a risk of spray drift. Do not spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt) or aquatic habitat.

**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.

The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls over long-sleeved shirt, long pants and goggles or face shield during mixing/loading, cleanup and repair. 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.
AERIAL SPRAYING INSTRUCTIONS:

1. **Apply in a spray volume of 30 to 45 L/ha at a pressure of 140-275 kPa to ensure proper dispersion, spraying characteristics and performance of Bison 400L™.**

2. Flat fan nozzles of 80° or 110° are recommended for optimum coverage. Do not use floodjet nozzles or controlled droplet application equipment. **Ensure that all in-line strainer and nozzle screens in the sprayer are 50 mesh or coarser.** Screens of 80 mesh size or finer should not be used.

3. Always ensure that agitation is continued until spraying is completed, even if stopped for brief periods of time. **If the agitation is stopped for more than 5 minutes, re-suspend the spray solution by running on full agitation prior to spraying. Bison 400L™ must be sprayed within the same day of mixing.**

4. Do not apply Bison 400L™ if the wind is more than 13 km/h. This will avoid spray drift onto non-target areas.

5. **Do not** spray Bison 400L™ if tame oats are present in adjacent, downwind fields.

6. When spraying is completed and prior to using other products, ensure the sprayer tank is thoroughly rinsed with clean water to remove any remaining Bison 400L™ residues. Using a pressure washer and the addition of a detergent or AGRAL 90 to the rinse water will enhance removal of residues.

7. **DO NOT APPLY within 50 m of non-crop areas.** This includes fish-bearing waters, wetlands (potholes, sloughs etc.) and wildlife habitat (hedgerows, rights of way, etc.).

READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS

NOTE TO USER:
The DIRECTIONS FOR USE for this product for the uses described below were developed by persons other than ADAMA Agricultural Solutions Canada Ltd. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. ADAMA Agricultural Solutions Canada Ltd. itself makes no representation or warranty with respect to performance (efficacy) or crop tolerance (phytotoxicity) claims for this product when used on the crops listed below.

Accordingly, the Buyer assumes all liability arising, and agrees to hold ADAMA Agricultural Solutions Canada Ltd. harmless from any claims based on efficacy and/or phytotoxicity in connection with the uses described below.

<table>
<thead>
<tr>
<th>DIRECTIONS FOR USE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rate of application</strong></td>
</tr>
<tr>
<td><strong>Site (Crop)</strong></td>
</tr>
<tr>
<td><strong>Application Timing</strong></td>
</tr>
<tr>
<td><strong>Pre-Harvest Interval</strong></td>
</tr>
</tbody>
</table>
CAUTIONS:
Do not tank mix Bison 400L™ with other herbicides, insecticides, fungicides, fertilizers, micronutrients or adjuvants other than those listed on this label, when applying to these forage grasses.
Apply Bison 400L™ prior to tillering of the weeds. Applications made after the weeds have tillered may result in unacceptable weed control due to poor crop competition compared to cereal crops.

Crop injury or slight yield reductions may be expected following treatment in the year of establishment, however, the injury is transient and the crop will recover the following year.

**Resistance-Management Recommendations**

For resistance management, Bison 400L™ is a Group 1 herbicide. Any weed population may contain or develop plants naturally resistant to Bison 400L™ and other Group 1 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 Bison 400L™ or other Group 1 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 or to report suspected resistance, contact your local ADAMA Agricultural Solutions Canada Ltd. representative, or call 1-855-264-6262.

† Products listed are trademarks of their respective companies.