BASF
We create chemistry

PRODUCT LABELS

FOR CERTITUDE:

CERTITUDE A

+

CERTITUDE B

Container Label

GROUP	27	HERBICIDE

Certitude® A

HERBICIDE

SUSPENSION CONCENTRATE

COMMERCIAL (AGRICULTURAL)

ACTIVE INGREDIENT: Topramezone.....336 g/L

Contains 1,2-benzisothiazolin-3-one at 0.0045% and 2-methyl-4-isothiazolin-3-one at 0.0045%, as preservatives

OR

Contains 1,2-benzisothiazolin-3-one at 0.04000%, 5-chloro-2-methyl-4-isothiazolin-3-one at 0.00122%, 2-methyl-4-isothiazolin-3-one at 0.00041% and 2-bromo-2-nitropropane-1,3-diol at 0.02700%, as preservatives

Warning, contains the allergen soy

REGISTRATION NO. 33908 **PEST CONTROL PRODUCTS ACT**

READ THE LABEL AND ATTACHED BROCHURE BEFORE USING

KEEP OUT OF REACH OF CHILDREN

IN CASE OF EMERGENCY ENDANGERING LIFE OR PROPERTY INVOLVING THIS PRODUCT, CALL DAY OR NIGHT, 1-800-454-2673

NET CONTENTS: 0.1 L to 1000 L

BASF Canada Inc.
100 Milverton Drive, 5th Floor
Mississauga, ON L5R 4H1
1-877-371-2273

CERTITUDE is a registered trade-mark of BASF SE, used with permission by BASF Canada Inc.

PRECAUTIONS: Please refer to the booklet for the complete list of precautions.

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 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. This product contains petroleum distillates. Vomiting may cause aspiration pneumonia.

ENVIRONMENTAL PRECAUTIONS

This product contains an active ingredient and aromatic petroleum distillates which are toxic to aquatic organisms. TOXIC to non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

This product demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

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 when heavy rain is forecast. Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative filter strip between the treated area and the edge of the water body.

TOXIC to small wild mammals.

STORAGE

Store this product away from food or feed.

Protect from freezing. If this product has been stored where freezing temperatures have occurred, agitate or mix contents of container well before use.

DISPOSAL

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 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.

Booklet

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Certitude® A

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PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN.

Avoid breathing spray or spray mist.

Avoid contact with skin, eyes, and clothing.

Harmful if swallowed.

Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. Gloves are not required during application within a closed cab. In addition wear protective eyewear (face shield or goggles) while mixing and loading.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

Do not apply directly to water or areas where surface water is present.

Do not contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

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

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 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. This product contains petroleum distillates. Vomiting may cause aspiration pneumonia.

ENVIRONMENTAL PRECAUTIONS

This product contains an active ingredient and aromatic petroleum distillates which are toxic to aquatic organisms. TOXIC to non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

This product demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

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 when heavy rain is forecast. Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative filter strip between the treated area and the edge of the water body.

TOXIC to small wild mammals.

STORAGE

Store this product away from food or feed.

Protect from freezing. If this product has been stored where freezing temperatures have occurred, agitate or mix contents of container well before use.

DISPOSAL

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.

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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.

GENERAL INFORMATION

Certitude A is a systemic herbicide that provides post-emergence control of emerged weeds, including those that are glyphosate resistant, when applied as a pre-seed treatment to canola.

Certitude A is absorbed by leaves, roots, and shoots and translocated to the growing points of sensitive weeds to provide post-emergence control of emerged weeds. **Certitude A** controls weeds by inhibiting carotenoid biosynthesis (HPPD inhibitor). Temperatures and moisture conditions for active plant growth are important for optimum **Certitude A** activity.

DIRECTIONS FOR USE

Application Timing and Weeds Controlled

When tank-mixes are permitted, read and observe all label directions, including rates and restrictions for each product used in the tank-mix. Follow the more stringent label precautionary measures for mixing, loading and applying stated on both product labels.

Certitude A + Certitude B

Apply **Certitude A** as surface application prior to seeding canola (all types, including LibertyLink, **Clearfield**, Roundup Ready and conventional) when weeds are actively growing. Always apply in tank mix with **Certitude B** for control of volunteer canola (all types, including glyphosate resistant) and kochia (including glyphosate resistant biotypes).

Application should be made to emerged volunteer canola seedlings at the fully expanded cotyledon to the 6-leaf stage and to emerged kochia up to 10 cm in height. Apply before seeding canola. Do not apply as a pre-emergence application.

Certitude A + Certitude B + Glyphosate

For broad spectrum weed control, **Certitude A** and **Certitude B** should be applied in combination with glyphosate as a pre-seed application to canola. **Certitude A** plus **Certitude B** will provide enhanced control of volunteer canola (all types, including glyphosate resistant) and kochia (including glyphosate resistant biotypes) over glyphosate applied alone. Refer to the glyphosate label for weeds controlled by glyphosate as a pre-seed application.

Certitude A is compatible with all liquid glyphosate formulations in which glyphosate is present as isopropylamine salt, di-ammonium salt or potassium salt. Use only glyphosate products registered for pre-seed application to canola.

Application Rates

Uniformly apply **Certitude A** as a broadcast spray by ground at rates indicated below in a water volume of 50 to 200 L/ha. Thorough spray coverage is required for optimum weed control.

Always apply **Certitude A** in tank mix with **Certitude B** and Merge Adjuvant at 0.5 L/ha. For broad spectrum weed control, **Certitude A** and **Certitude B** should be applied in combination with glyphosate. Apply with Merge Adjuvant at 0.5 L/ha.

Certitude A (mL/ha)	**Certitude B** (mL/ha)	**Glyphosate** (g ae/ha) [1]	**Merge Adjuvant** (L/ha)
18	600	450 – 900	0.5
Restrictions: Maximum 1 application per season.			

[1] A rate of 450 - 900 g ae/ha is equivalent to 0.83 to 1.67 L/ha of Roundup WeatherMAX with Transorb 2 Technology Liquid Herbicide (540 g ae/L). Other glyphosate formulations may require a rate calculation adjustment according to active ingredient concentration. Refer to the glyphosate label for rate and weeds controlled.

Crop Harvest

There is no required preharvest interval between a pre-seed application of **Certitude A** and the harvest of canola. Grain and meal from treated canola can be fed to livestock. Do not graze or feed other portions of the treated canola to livestock.

Spraying Instructions

DO NOT apply using aerial application equipment.

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

Uniformly apply with properly calibrated ground equipment using a water volume of 50-200 L/ha. For applications to dense weed infestations and thick canopies, higher water volumes are recommended.

Certitude A may cause injury to desirable trees and plants. When spraying in the vicinity of sensitive plants, DO NOT apply when wind speeds exceed 8 km/h or when drift near desirable plants is possible. Leave an adequate buffer zone between spraying area and sensitive plants.

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 S572.1) medium classification. Boom height must be 60 cm or less above the crop or ground.

Spray Buffer zones
A spray buffer zone is NOT required for uses with hand-held application equipment permitted on this label.

The spray 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, riparian areas and shrublands).

Method of application	Crop	Spray Buffer Zones (metres) Required for the Protection of Terrestrial Habitat
Field sprayer	Canola	2

For tank mixes, consult the labels of the tank-mix partners and observe the largest (most restrictive) spray buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.

The spray drift buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Spray Buffer Zone Calculator on the Pesticides and Pest Management Regulatory Agency website.

Mixing Instructions

1. Fill clean spray tank half full with clean water. Start agitation system. Agitation should be running during the entire mixing procedure.

2. Add the correct amount of **Certitude A** and continue to agitate until thoroughly mixed.

3. After the **Certitude A** has visibly dispersed, add the required amount of **Certitude B**.

4. Add in **glyphosate** herbicide.

5. Add the correct amount of **Merge Adjuvant**.

6. Continue agitation while filling the remainder of the tank with water necessary to fill the spray tank.

Spray Equipment Cleaning

Follow these steps to clean the spray equipment:

1. Thoroughly hose down the inside and outside of equipment surfaces while filling the spray tank half-full with water. Flush by operating the sprayer until the system is purged of the rinse water.

2. Fill the tank with water, adding 1 L of household ammonia for every 100 L of water. Operate the spray pump to circulate the ammonia solution through the spray system for 15-20 minutes and discharge a small amount of the ammonia solution throughout the spray boom and nozzles. Let the solution stand for several hours, preferably overnight.

3. Flush the solution out of the spray tank through the boom.

4. Remove the nozzles and screens and flush the system with two tanks full of water.

5. Refer to the tank mix partner's product label for any additional cleaning instructions not included in the above steps.

Rotational Cropping

Fields treated with **Certitude A** can be seeded to winter wheat at a minimum four months after application and can be seeded to spring wheat, field corn, canola, lentils, navy (white) beans, soybeans, peas, potatoes and alfalfa the following year.

Conduct a field bioassay (a test strip grown to maturity) the year before growing any other crop.

Always refer to the tank mix partner's product label for any additional recropping restrictions.

RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, **Certitude A** is a Group 27 herbicide. Any weed population may contain or develop plants naturally resistant to **Certitude A** and other Group 27 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 **Certitude A** or other Group 27 herbicides within a growing season 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. To delay resistance, the less resistance-prone partner should control the target weed(s) as effectively as the more resistance-prone partner.

- 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 (for example, higher crop seeding rates; precision fertilizer application method and timing to favour the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.

- Monitor weed populations after herbicide application for signs of resistance development (for example, only one weed species on the herbicide label not controlled). If resistance is suspected, prevent weed seed production in the affected area if possible by an alternative herbicide from a different group.

- Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment and planting clean seed.

- Have suspected resistant weed seeds tested by a qualified laboratory to confirm resistance and identify alternative herbicide options.

- 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 BASF at 1-877-371-2273.

MERGE is a registered trademark of BASF Canada Inc.

All other products named are registered trademarks of their respective companies.

(Sleeve)

GROUP	6	HERBICIDE

Certitude® B

HERBICIDE

EMULSIFIABLE CONCENTRATE

COMMERCIAL

ACTIVE INGREDIENT: Bromoxynil, present as octanoate ester … 235 g/L

REGISTRATION NO. 33893 **PEST CONTROL PRODUCTS ACT**

POISON

DANGER - EYE AND SKIN IRRITANT
POTENTIAL SKIN SENSITIZER

READ THE LABEL AND BOOKLET BEFORE USING

KEEP OUT OF REACH OF CHILDREN

IN CASE OF EMERGENCY ENDANGERING LIFE OR PROPERTY INVOLVING THIS PRODUCT, CALL DAY OR NIGHT, 1-800-454-2673

NET CONTENTS: 1 - 450 L

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1-877-371-2273

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PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN.

POTENTIAL SKIN SENSITIZER.

WARNING POISON.

Do not get into eyes, on skin or on clothing. Store the container, tightly closed, away from seeds, fertilizer, plants and foodstuffs. Wash concentrate from skin or eyes immediately. Do not inhale spray mist. After use wash hands and other exposed skin. Avoid spray drift onto crops other than those recommended. Avoid contamination of ponds, streams, rivers and other water sources. Wear goggles or a face shield during mixing/loading operations.

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

Ground applications: Wear coveralls over a long-sleeved shirt, long pants, chemical- resistant gloves, socks and shoes during mixing, loading, clean-up and repair. Wear a long-sleeved shirt and long pants, chemical resistant gloves, and socks plus shoes during applications. Gloves are not required during application within a closed cab.

Aerial applications – the field crew and the mixer/loaders: Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, clean-up and repair.

Aerial applicators: Wear a long-sleeved shirt, long pants, socks and shoes during application. Gloves are not required during application within a closed cockpit. Do not allow the pilot to mix chemicals to be loaded onto the aircraft.

Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. DO NOT reuse them.

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours unless noted below:

CROP	POST-APPLICATION ACTIVITY	REI
Garlic	Irrigation, handset	2 days
	All other activities	24 hours
Sweet Corn	Irrigation, handset	5 days
	Harvest, hand	20 days
	All other activities	24 hours

DO NOT apply this product in a way that this product will contact workers or other persons, either directly or through drift. Only handlers wearing personal protective equipment may be in the area being treated during application.

ENVIRONMENTAL PRECAUTIONS

Toxic to aquatic organisms and 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 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.

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.

FIRST AID

In case of Ingestion: 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.

In case of Eye Contact: 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.

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.

In case of Inhalation: 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.

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

TOXICOLOGICAL INFORMATION

This product contains PETROLEUM DISTILLATES. Vomiting may cause aspiration pneumonia. Treat symptomatically.

STORAGE CONDITIONS

Certitude® B will solidify below minus 20°C but will become usable at temperatures above 0°C. Insecticides and fungicides should be segregated from herbicides so as to prevent the possibility of cross-contamination.

SHAKE WELL BEFORE USING.

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 rinsing 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.

(Booklet)

GROUP	6	HERBICIDE

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EMULSIFIABLE CONCENTRATE

COMMERCIAL

ACTIVE INGREDIENT: Bromoxynil, present as octanoate ester … 235 g/L

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GENERAL INFORMATION & DIRECTIONS FOR USE ..... SECTION 1

WEEDS CONTROLLED ..... SECTION 2

APPLICATION & MIXING INSTRUCTIONS
FOR GROUND OR AIR ..... SECTION 3

CROP INSTRUCTIONS, INCLUDING TANK MIXES
- Alfalfa (seedling and established) ..... SECTION 4
- Barley (not underseeded to legumes) ..... SECTION 5
- Canary Seed ..... SECTION 6
- Corn (Field and Sweet) ..... SECTION 7
- Fall Rye ..... SECTION 8
- Flax (including low linolenic acid varieties) ..... SECTION 9
- Oats (not underseeded to legumes) ..... SECTION 10
- Triticale (not underseeded to legumes) ..... SECTION 11
- Wheat (Spring and Winter - not underseeded to legumes) ..... SECTION 12
- Garlic ..... SECTION 13
- Onion (dry bulb only) ..... SECTION 14
- Minimum or Zero Till ..... SECTION 15
- Pre-Seeding Burndown ..... SECTION 16
- Canola (prior to planting) ..... SECTION 17

Certitude B can be tank mixed with the following products:
- 2, 4-D
- MCPA
- Atrazine
- ACHIEVE Liquid
- BANVEL II
- ULTIM 75DF
- ACCENT 75DF
- Glyphosate (present as isopropylamine or potassium salt)
- AIM EC Herbicide
- ROUNDUP WEATHERMAX WITH TRANSORB 2 TECHNOLOGY
- LIQUID HERBICIDE

IMPORTANT SAFETY INFORMATION ..... SECTION 18
- Precautions
- Pre-Harvest Grazing Intervals First Aid
- Storage
- Disposal

SECTION 1

GENERAL INFORMATION

Certitude® B controls spring germinating weeds such as wild buckwheat, Tartary buckwheat and green smartweed. **Certitude B** works best applied to seedling weeds. **Certitude B** is a low volatile ester formulation. **Certitude B** applied as directed controls some weeds, which deprive young corn and cereal crops of vital moisture and fertilizer, reduces contamination of crops with weeds seeds, improves quality and makes harvesting easier. **Certitude B** is a contact herbicide. Thorough coverage of the weed seedlings is essential for optimum control.

DIRECTIONS FOR USE

RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, **Certitude B** is a Group 6 herbicide. Any weed population may contain or develop plants naturally resistant to **Certitude B** and other Group 6 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 **Certitude B** or other Group 6 herbicides within a growing season (sequence) or among growing seasons 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. To delay resistance, the less resistance-prone partner should control the target weed(s) as effectively as the more resistance-prone partner.

- Herbicide use should be based on an integrated weed management program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical control methods), cultural (for example, higher crop seeding rates; precision fertilizer application method and timing to favour the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.

- Monitor weed populations after herbicide application for signs of resistance development (for example, only one weed species on the herbicide label not controlled). If resistance is suspected, prevent weed seed production in the affected area if possible by an alternative herbicide from a different group. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.

- Have suspected resistant weed seeds tested by a qualified laboratory to confirm resistance and identify alternative herbicide options.

- 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 BASF at 1-877-371-2273.

SECTION 2

APPLICATION TIMING

For best results, spray up to 4-leaf stage of weeds. Apply in good growing conditions. Application must be made before the crop shields the weeds.

WEEDS CONTROLLED BY CERTITUDE B ALONE

Seedlings up to 4-leaf stage:

Green Smartweed	Common Ragweed
Pale Smartweed	Triazine Resistant Pigweed
Lady's-Thumb	Cocklebur
Bluebur	Russian Thistle **
Kochia **	Wild Mustard *
Cow Cockle *	Stinkweed *
Velvet Leaf ***	American Nightshade

Seedlings up to 8 leaf stage:

Wild Buckwheat	Tartary Buckwheat
Common Buckwheat	Common Groundsel
Lamb's- Quarters	

* Under normal conditions will be controlled up to the 4-leaf stage. Plants beyond this stage are unlikely to be controlled.
** Spray before plants are 5 cm high.
*** Spray before plants are 8 cm high.

WEEDS CONTROLLED BY CERTITUDE B + MCPA

Weeds listed for **Certitude B** alone plus these additional weeds:

Seedlings up to 4-leaf stage:

Ball Mustard	Canada Thistle ****
Flixweed	Hemp Nettle ***
Night Flowering Catchfly	Perennial Sowthistle ****
Redroot Pigweed	Scentless Chamomile *
Shepherd's Purse	Volunteer Canola **
Volunteer Sunflower	

Seedlings up to 8 leaf stage:

Common Ragweed	Stinkweed
Wild Mustard	Wormseed Mustard

* Spring annuals only. Will not control overwintered weeds.
** For heavy infestations tank-mix 550 g active ingredient of MCPA per hectare.
*** Tank-mix 550 g active ingredient of MCPA per hectare. Plants beyond the 4-leaf stage are not likely to be controlled. Plants emerging after application, which is often the case on peat type soils, will not be controlled.
**** Top growth controlled.

WEEDS CONTROLLED BY CERTITUDE B + 2,4-D

Weeds listed for **Certitude B** alone plus these additional weeds:

Seedlings up to 4-leaf stage:

Ball Mustard	Flixweed *
Redroot Pigweed	Night Flowering Catchfly
Volunteer Sunflower	Shepherd's Purse

Seedlings up to 8-leaf stage:

Stinkweed *	Wild Mustard

* The higher rate of 2,4-D is recommended for larger over winter weeds (fall rosettes).

SECTION 3

APPLICATION AND MIXING INSTRUCTIONS FOR GROUND OR AIR

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) 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 distribution along the spray boom length MUST NOT exceed 65% of the wingspan or rotorspan.

MIXING INSTRUCTIONS

1. Fill spray tank half full with clean water.
2. Add required amount of **Certitude B**. Begin agitation.
3. If tankmixing, add the recommended amount of the tank mix partner product to the spray tank first, agitate, and then add **Certitude B** (unless otherwise directed).
4. Complete filling spray tank with water, continue agitation.

TANK MIXES

Certitude B is recommended in tank mix with other products. Follow all instructions for mixing, spraying, precautions, limitations, crop rotations, application timing, preharvest intervals, etc., on labels of products tank mixed with **Certitude B**.

APPLICATION RATE

Refer to specific instructions for each crop.

At the 1.2 L/ha rate, a 9.71 litre container treats 8.1 hectares (20 acres).
At the 1.4 L/ha rate, a 9.71 litre container treats 6.9 hectares (17.1 acres).

Wash out spray tank and lines and clean all filters, screens and tips. Select nozzle tips to apply the recommended volume of water per hectare. Flood jet type tips are not recommended. Adjust boom height to ensure uniform coverage of weeds. For ground applications, spray at 5-10 km/h. Calibrate sprayer and ensure that all tips are in good condition and spraying the same volume.

ENVIRONMENTAL PRECAUTIONS

TOXIC to aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

Do not apply to any body of water. 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 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.

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 or fine textured such as clay).

Avoid application of this 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.

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, 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.

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	All crops		1	1	1	1	1
Aerial	Barley and wheat	Fixed wing	20	5	1	1	55
		Rotary wing	20	3	1	1	45

The buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Buffer Zone Calculator on the Pesticides portion of the Canada.ca website.

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

NOTE: Applicators may recalculate a site-specific buffer zone by combining information on current weather conditions and spray configuration for the following applications: all airblast applications, and for field and aerial applications which specify the following droplet size category wording on the product label: “DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) [Fine or Medium or Coarse] classification.”

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.

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 applications - the field crew and the mixer/loaders: Wear coveralls over a long- sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, clean-up and repair.

Aerial applicators: Wear a long-sleeved shirt, long pants, socks and shoes during application. Gloves are not required during application within a closed cockpit. Do not allow the pilot to mix chemicals to be loaded onto the aircraft.

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.

Product Specific Precautions
Read and understand the entire label before opening this product. If you have questions, call the manufacturer 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:

Volume: Apply the recommended rate in a minimum spray volume of 20 litres per hectare.

FOR AERIAL APPLICATION refer to the following 12 points.

1. Weeds must be treated at the recommended growth stages while actively growing. Weed stage should be checked prior to spraying.
2. **Certitude B** plus either MCPA or 2,4-D must be applied in volume rates of not less than 20 L/ha. For best results when there is a heavy crop canopy, or when the majority of the weeds are cow cockle, smartweed, hempnettle, pigweed or Canada thistle, a volume rate of 40 L/ha is recommended.
3. The application rate per hectare of **Certitude B** and the phenoxy herbicides must not be reduced.
4. Effective swath width (as determined by boom width and spray pattern overlaps) must be accurately maintained. Conduct tests to determine the effective swath width of your aircraft. (For example, the effective swath width may be less than one half of the overall swath).
5. Flat-fan or hollow cone nozzles are recommended.
6. Nozzles should be positioned to compensate for prop-wash and wing-tip vortex effects. Nozzles should not be placed within 1 m of wing-tips.
7. Nozzles orientations (measured from direction of flight) to achieve desired minimum droplet density with maximum coverage.

VOLUME RATE	NOZZLE TYPE	NOZZLE ORIENTATION
20 L/ha	Flat Fan	90°
	Hollow Cone	135°
30 L/ha	Flat Fan	90 – 135°
	Hollow Cone	135°
40 L/ha	Flat Fan	135°
	Hollow Cone	135 – 180°

8. Efficient track marking is essential ("Automatic Flagmen" markers should only be used as a back-up system).
9. Avoid spraying in temperatures greater than 25°C.
10. Spray only when wind is blowing away from a sensitive crop.
11. Do not spray in a dead calm and when wind speed exceeds 8 km per hour.
12. For aerial application mixers/loaders must wear coveralls over normal working clothes.

Spray Pressure:	Ground	275 kPa.
	Air	Use pressures at the lower end of the range. recommended by the nozzle manufacturer.
Nozzles:	Ground	Flat Fan recommended.
	Air	**Do not Use Flood Jet Nozzles.** See point 7 above.

SECTION 4

ALFALFA (Seedling, and established alfalfa grown for seed production only)
Provinces of Alberta, Saskatchewan and Manitoba only

Certitude B ALONE	
Weeds Controlled:	See Section 2.
Crop Treatment Stage:	Seedling – From the 2 to 6 trifoliate leaf stage. Do not apply to seedlings under stress. Established – May be treated until alfalfa is 25 cm tall. Maximum of 2 applications per year. Minimum re-treatment interval for the second application is 21 days.
Application Method:	Ground application only. DO NOT apply using aerial application equipment. Apply in 100 litres of water per hectare. See Section 3.
Application Rate:	Seedling – 1.2 L/ha. Established – 1.2 to 1.4 L/ha.

Note: Temporary crop injury, such as scorching of leaves may occur under adverse growing conditions (cool and wet, or hot [over 25°C] and humid).

Do not apply to alfalfa seedlings in the unifoliate or 1st trifoliate leaf stage. Avoid overlapping as severe crop injury may occur.

SECTION 5

BARLEY (not underseeded to legumes)

Certitude B ALONE	
Weeds Controlled:	See Section 2.
Crop Treatment Stage:	From the 2-leaf to early flag-leaf stage, but not after the boot stage.
Application Method:	Ground – apply in 100 litres of water per hectare. Air – apply in 20-40 litres of water per hectare. See Section 3.
Application Rate:	Weeds up to leaf stage indicated - 1.2 L/ha. Weeds beyond leaf stage indicated - 1.4 L/ha.

Certitude B + MCPA	
Weeds Controlled:	See Section 2 under **Certitude B** + MCPA mixture.
Crop Treatment Stage:	From the 2-leaf to early flag-leaf stage.
Application Method:	Ground – apply in 50-100 litres of water per hectare. Air – apply in 20-40 litres of water per hectare. See Section 3.
Application Rate:	1.2 L/ha **Certitude B** + 275-550 g active ingredient MCPA per hectare.

Note: MCPA-K is preferred for hempnettle although other formulations may be used. Add MCPA to the spray tank first, agitate, then add **Certitude B**.

Certitude B + 2,4-D	
Weeds Controlled:	See Section 2 under **Certitude B** + 2,4-D mixture.
Crop Treatment Stage:	From the 4-leaf to early flag-leaf stage. Application prior to the 4-leaf stage may result in crop injury.
Application Method:	Ground – apply in 100 litres of water per hectare. Air – apply in 20-40 litres of water per hectare. See Section 3.
Application Rate:	1.2 L/ha **Certitude B** + 275-420 g active ingredient 2,4-D per hectare.

Note: 2, 4-D ester is preferred although other formulations may be used. Add 2,4-D to the spray tank first, agitate, then add **Certitude B**.

Certitude B + ACHIEVE Liquid	
Weeds Controlled:	See Section 2, plus weeds indicated on the ACHIEVE Liquid label.
Crop Treatment Stage:	From the 2-leaf to early flag-leaf stage.
Application Method:	Ground - apply in 50-100 litres of water per hectare. Air - apply in 30-45 litres of water per hectare. See Section 3.
Application Rate:	1.2 L/ha **Certitude B** + 0.5 L/ha ACHIEVE Liquid + 0.5% v/v TURBOCHARGE adjuvant.

Note: Add ACHIEVE Liquid to the spray tank first, agitate well, then add **Certitude B**, agitate well, and then add TURBOCHARGE adjuvant. Refer to the ACHIEVE Liquid label for instructions, precautions and limitations.

SECTION 6

CANARY SEED (seed production for bird feed)

Certitude B ALONE	
Weeds Controlled:	See Section 2.
Crop Treatment Stage:	From the 3- to 5-leaf stage.
Application Method:	Ground application only. DO NOT apply using aerial application equipment. Apply in 100 litres of water per hectare. See Section 3.
Application Rate:	1.2 L/ha.

Certitude B + MCPA	
Weeds Controlled:	See Section 2 under **Certitude B** + MCPA mixture.
Crop Treatment Stage:	From the 3- to 5-leaf stage.
Application Method:	Ground application only. DO NOT apply using aerial application equipment. Apply in 100 litres of water per hectare. See Section 3.
Application Rate:	1.2 L/ha **Certitude B** + 275 g active ingredient MCPA per hectare.

Note: MCPA ester is preferred although other formulations may be used. Add MCPA to the spray tank first, agitate, then add **Certitude B**.

SECTION 7

CORN (Field and Sweet)

Certitude B ALONE	
Weeds Controlled:	See Section 2.
Crop Treatment Stage:	Corn may be treated with a broadcast post-emergence application at the recommended rate from the 4-leaf stage onward. To ensure adequate coverage of weeds, drop pipes should be used when corn is beyond the 8-leaf stage or for a second application for later germinating weeds such as cocklebur and velvetleaf. Minimum re-treatment interval for the second application is 21 days. The pre-harvest interval (PHI) is 20 days.
Application Method:	Ground application only. DO NOT apply using aerial application equipment. Apply in 200-300 litres of water per hectare. See Section 3.
Application Rate:	Light weed infestation – 1.2 L/ha. Heavy weed infestation – 1.4 L/ha.

Note: Temporary crop injury, such as scorching of leaves may occur under adverse growing conditions (cool and wet or hot [over 25°C] and humid). DO NOT add oil or surfactant.

Certitude B may be applied alone to seed corn inbreds once per year. (Variability in tolerance among inbred lines has been observed. Not all seed corn inbreds have been tested; the use of **Certitude B** must be approved by the Seed Corn company and comply with the directions given by the Seed Corn company).

Certitude B + ATRAZINE	
Weeds Controlled:	See Section 2, plus weeds indicated on the atrazine label.
Crop Treatment Stage:	From the 4- to 8-leaf stage. Refer to the atrazine label for limitations on grassy weeds.
Application Method:	Ground application only. DO NOT apply using aerial application equipment. Apply in 200-300 litres of water per hectare. See Section 3.
Application Rate:	1.2 L/ha of **Certitude B** + 1.1 - 1.5 kg active ingredient of atrazine per hectare.

Note: Add atrazine to the spray tank first, agitate well, and then add **Certitude B**.
Temporary crop injury, such as scorching of leaves may occur under adverse growing conditions (cool and wet or hot [over 25°C] and humid).
DO NOT add oil or surfactant or use atrazine formulations that contain oil.
Refer to the atrazine label for instructions, precautions and limitations, especially on crop restrictions the following year.

Certitude B + LOW RATE ATRAZINE	
Weeds Controlled:	See Section 2, plus seedlings up to 6-leaf stage – redroot pigweed (triazine susceptible), velvetleaf*; seedlings up to 8-leaf stage - common ragweed. *Spray before weed reaches 10 cm in height.
Crop Treatment Stage:	From the 4- to 8-leaf stage.
Application Method:	Ground application only. DO NOT apply using aerial application equipment. Apply in 200-300 litres of water per hectare. See Section 3.
Application Rate:	1.2 to 1.4 L/ha of **Certitude B** + 0.5 kg active ingredient of atrazine per hectare.

Note: Add atrazine to the spray tank first, agitate well, and then add **Certitude B**. Temporary crop injury, such as scorching of leaves may occur under adverse growing conditions (cool and wet or hot [over 25°C] and humid).
DO NOT add oil or surfactant or use atrazine formulations that contain oil.
Refer to the atrazine label for instructions, precautions and limitations, especially on crop restrictions the following year.

Certitude B + BANVEL II (Do Not Use on Sweet Corn or Crops Grown for Seed Production)	
Weeds Controlled:	See Section 2, plus weeds indicated on the BANVEL II label.
Crop Treatment Stage:	From the 4- to 6-leaf stage as an overall broadcast treatment. Use drop nozzles to spray when corn is beyond the 6-leaf stage and up to 50 cm in height. Do not apply later than 2 weeks prior to tassel emergence or to corn over 50 cm in height.
Application Method:	Ground application only. DO NOT apply using aerial application equipment. Apply in 200-300 litres of water per hectare. See Section 3.
Application Rate:	1.2 L/ha **Certitude B** + 290 mL/ha BANVEL II.

Note: Temporary crop injury, such as scorching of leaves may occur under adverse growing conditions (cool and wet or hot [over 25°C] and humid).
Refer to the BANVEL II label for instructions, precautions and limitations. Do not add oil or surfactant.
Add **Certitude B** to the spray tank first, agitate well, then add BANVEL II.

Certitude B + ULTIM 75DF + Non-Ionic Surfactant (Field Corn Only, Eastern Canada)	
Weeds Controlled:	See Section 2, plus weeds indicated on the ULTIM 75DF label.
Crop Treatment Stage:	From the 4- to 6-leaf stage (up to 4 visible collars or 30 cm in height, leaf extended).
Application Method:	Ground application only. DO NOT apply using aerial application equipment. Apply in 200-300 litres of water per hectare. See Section 3.
Application Rate:	1.2 L/ha **Certitude B** + 33.7 g/ha (1 soluble bag) ULTIM 75DF + 0.2% v/v non-ionic surfactant. (Examples: CITOWETT PLUS, AGRAL 90, AG-SURF)

Note: Apply this mix only when temperatures in the 24 hours before and after application time range between 5°C and 28°C. Temperatures beyond this range increase the potential for crop injury.
Separate applications of ULTIM 75DF followed by **Certitude B** (minimum 12 hours later) will reduce the potential for injury.
Refer to the ULTIM 75DF label for instructions, precautions and limitations.

Certitude B + LOW RATE ATRAZINE + ULTIM 75DF + Non-Ionic Surfactant (Field Corn Only, Eastern Canada)	
Weeds Controlled:	See Section 2, plus weeds indicated on the atrazine and ULTIM 75DF label.
Crop Treatment Stage:	From the 3- to 6-leaf stage (up to 4 visible collars or 30 cm in height, leaf extended).
Application Method:	Ground application only. DO NOT apply using aerial application equipment. Apply in 200-300 litres of water per hectare. See Section 3.
Application Rate:	0.6 L/ha **Certitude B** + 0.5 kg active ingredient of atrazine per hectare + 33.7 g/ha (1 soluble bag) ULTIM 75DF + 0.2% v/v non-ionic surfactant. (Examples: CITOWETT PLUS, AGRAL 90, AG-SURF)

Note: Apply this mix only when temperatures in the 24 hours before and after application time range between 5°C and 28°C. Temperatures beyond this range increase the potential for crop injury.
Separate applications of ULTIM 75DF followed by **Certitude B** (minimum 12 hours later) will reduce the potential for injury.
Refer to the atrazine label for instructions, precautions and limitations, especially on crop restrictions the following year.
Refer to the ULTIM 75DF label for instructions, precautions and limitations.

Certitude B + ACCENT 75DF + Non-Ionic Surfactant (Field Corn, Eastern Canada Only)	
Weeds Controlled:	See Section 2, plus weeds indicated on the ACCENT 75DF label.
Crop Treatment Stage:	From the 4- to 8-leaf stage (2 to 6 visible collars).
Application Method:	Ground application only. DO NOT apply using aerial application equipment. Apply in 200-300 litres of water per hectare. See Section 3.
Application Rate:	1.2 L/ha **Certitude B** + 33.4 g/ha (1 soluble bag) ACCENT 75DF + 0.2% v/v non-ionic surfactant. (Examples: CITOWETT PLUS, AGRAL 90, AG-SURF)

Note: Refer to the ACCENT 75DF label for instructions, precautions and limitations.
Do not apply prior to 4-leaf (2 visible collars) or after the 8-leaf (6 visible collars) stage of corn.

SECTION 8

FALL RYE (not underseeded to legumes)

Certitude B ALONE	
Weeds Controlled:	See Section 2.
Crop Treatment Stage:	From the time growth begins in the spring to the early flag-leaf stage. Apply before weeds are past the 4- to 5-leaf stage.
Application Method:	Ground application only. DO NOT apply using aerial application equipment. Apply in 50 - 100 litres of water per hectare. See Section 3.
Application Rate:	Weeds up to leaf stage indicated - 1.2 L/ha. Weeds beyond leaf stage indicated - 1.4 L/ha

Certitude B + MCPA	
Weeds Controlled:	See Section 2 under **Certitude B** + MCPA mixture.
Crop Treatment Stage:	From the time growth begins in the spring to the early flag-leaf stage. Apply before weeds are past the 4- to 5-leaf stage.
Application Method:	Ground application only. DO NOT apply using aerial application equipment. Apply in 50-100 litres of water per hectare. See Section 3.
Application Rate:	1.2 L/ha **Certitude B** + 275 g active ingredient MCPA per hectare.

Note: MCPA ester is preferred although other formulations may be used. Add MCPA to the spray tank first, agitate, then add **Certitude B**.

SECTION 9

FLAX (including low linolenic acid varieties)

Certitude B ALONE	
Weeds Controlled:	See Section 2.
Crop Treatment Stage:	From when flax is 5 cm in height, up to the bud stage. For best crop safety, treat when 5 to 10 cm in height.
Application Method:	Ground application only. DO NOT apply using aerial application equipment. Apply in 100 litres of water per hectare. See Section 3.
Application Rate:	1.2 L/ha

Note: Some leaf burn and retarded growth may be expected. For best crop safety, spray in the evening, and avoid spraying during hot (over 29°C), humid weather.

Certitude B + MCPA	
Weeds Controlled:	See Section 2 under **Certitude B** + MCPA mixture.
Crop Treatment Stage:	From when flax is 5 cm in height, up to the bud stage. For best crop safety, treat when 5 to 10 cm in height.
Application Method:	Ground application only. DO NOT apply using aerial application equipment. Apply in 100 litres of water per hectare. See Section 3.
Application Rate:	1.2 L/ha **Certitude B** + 275 g active ingredient MCPA per hectare.

Note: Some leaf burn and retarded growth may be expected. For best crop safety, spray in the evening, and avoid spraying during hot (over 29°C), humid weather. Add MCPA to the spray tank first, agitate, then add **Certitude B**.
The amine, ester or K-salt formulations of MCPA can be used in this tank mixture.

SECTION 10

OATS (not underseeded to legumes)

Certitude B ALONE	
Weeds Controlled:	See Section 2.
Crop Treatment Stage:	From the 2-leaf to early flag-leaf stage. Apply before weeds are past the 4- to 5-leaf stage.

Application Method:	Ground application only. DO NOT apply using aerial application equipment. Apply in 50 - 100 litres of water per hectare. See Section 3.
Application Rate:	Weeds up to leaf stage indicated - 1.2 L/ha. Weeds beyond leaf stage indicated - 1.4 L/ha

Certitude B + MCPA	
Weeds Controlled:	See Section 2 under **Certitude B** + MCPA mixture.
Crop Treatment Stage:	From the 2-leaf to early flag-leaf stage.
Application Method:	Ground application only. DO NOT apply using aerial application equipment. Apply in 50-100 litres of water per hectare. See Section 3.
Application Rate:	1.2 L/ha **Certitude B** + 275-550 g active ingredient MCPA per hectare.

Note: MCPA-K is preferred for hempnettle although other formulations may be used. Add MCPA to the spray tank first, agitate, then add **Certitude B**.

SECTION 11

TRITICALE (not underseeded to legumes)

Certitude B ALONE	
Weeds Controlled:	See Section 2.
Crop Treatment Stage:	From the 2-leaf to early flag stage.
Application Method:	Ground application only. DO NOT apply using aerial application equipment. Apply in 100 litres of water per hectare. See Section 3.
Application Rate:	Weeds up to leaf stage indicated - 1.2 L/ha. Weeds beyond leaf stage indicated - 1.4 L/ha.

SECTION 12

WHEAT: (spring & winter) (not underseeded to legumes)

Certitude B ALONE	
Weeds Controlled:	See Section 2.

Crop Treatment Stage:	Spring Wheat – From the 2-leaf to early flag stage, but not at or after the boot stage. Apply before weeds are past the 4- to 5-leaf stage. Winter Wheat – From the 2-leaf to 4-leaf stage in the fall or from the time growth begins, to the early flag-leaf stage in the spring.
Application Method:	Ground – apply in 50-100 litres of water per hectare. Air – apply in 20-40 litres of water per hectare. See Section 3.
Application Rate:	Weeds up to leaf stage indicated - 1.2 L/ha. Weeds beyond leaf stage indicated - 1.4 L/ha.

Certitude B + MCPA	
Weeds Controlled:	See Section 2 plus under **Certitude B** + MCPA mixture.
Crop Treatment Stage:	Spring Wheat – From the 2-leaf to early flag-leaf stage. Winter wheat – From the 2-leaf to 4-leaf stage in the fall or from the time growth begins, to the early flag-leaf stage in the spring.
Application Method:	Ground – apply in 50-100 litres of water per hectare. Air – apply in 20-40 litres of water per hectare. See Section 3.
Application Rate:	Spring Wheat – 1.2 L/ha **Certitude B** + 275-550 g active ingredient MCPA per hectare where indicated. Winter Wheat – 1.2 L/ha **Certitude B** + 275 g active ingredient MCPA per hectare.

Note: MCPA-K is preferred for hempnettle although other formulations may be used. Add MCPA to the spray tank first, agitate, then add **Certitude B**.

Certitude B + 2,4-D	
Weeds Controlled:	See Section 2 under **Certitude B** + 2,4-D mixture.
Crop Treatment Stage:	Spring and Winter Wheat - From the 4-leaf to early flag-leaf stage. Applications before the 4-leaf stage may injure the crop.
Application Method:	Ground – apply in 100 litres of water per hectare. Air – apply in 20-40 litres of water per hectare. See Section 3.
Application Rate:	1.2 L/ha **Certitude B** + 275-420 g active ingredient 2,4-D per hectare.

Note: 2,4-D ester is preferred although other formulations may be used. Add 2,4-D to the spray tank first, agitate, then add **Certitude B**.

Certitude B + ACHIEVE Liquid (Spring, Winter and Durum Wheat)	
Weeds Controlled:	See Section 2, plus weeds indicated on the ACHIEVE Liquid label.

Crop Treatment Stage:	From the 2-leaf to early flag-leaf stage.
Application Method:	Ground - apply in 50-100 litres of water per hectare. Air – apply in 30-45 litres of water per hectare. See Section 3.
Application Rate:	1.2 L/ha **Certitude B** + 0.5 L/ha ACHIEVE Liquid + 0.5% v/v TURBOCHARGE adjuvant.

Note: Add ACHIEVE Liquid to the spray tank first, agitate well, then add **Certitude B**, agitate well, and then add TURBOCHARGE adjuvant. Refer to the ACHIEVE Liquid label for instructions, precautions and limitations.

SECTION 13

GARLIC

Certitude B ALONE	
Weeds Controlled:	See Section 2.
Crop Treatment Stage:	Apply early post emergent to weeds by ground application only. One application per year. Observe a PHI of 58 days.
Application Method:	Ground application only. DO NOT apply using aerial application equipment. Apply in 200-300 litres of water per hectare at a pressure of 275 kPa. See Section 3.
Application Rate:	1.2 L/ha.

SECTION 14

ONION (Dry Bulb Only)

NOTE TO USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS:

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than BASF Canada under the User Requested Minor Use Label Expansion program. For these uses, BASF Canada has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) under all environmental conditions or for all crop varieties when used in accordance with the label. The user should test the product on a small area first, under local conditions and using standard practices, to confirm the product is suitable for widespread application.

ONION (Dry Bulb Only)

	Spray Volume and Pressure	**Timing**	**Application Rate**
Certitude B ALONE	Apply in 200 L water per hectare at a pressure of 170 kPa.	Make two applications per season, at an interval of 10 to 18 days. The first application should be made when onions are at the 2- to 3-leaf stage, and the second application made when onions are at the 4- to 5- leaf stage. DO NOT harvest within 75 days of application.	Apply **Certitude B** twice per season, each time at a rate of 0.6 L/ha. **Application Precaution: Certitude B** may cause severe leaf burn in onions if weather conditions have not been conducive to the development of the outer waxy layer of the onion leaf.
	WEEDS CONTROLLED		
Certitude B ALONE	**Seedlings up to 4-leaf stage:** Redroot pigweed, common groundsel.		

SECTION 15

MINIMUM OR ZERO TILL

Certitude B + GLYPHOSATE (present as isopropylamine or potassium salt)	
Weeds Controlled:	See Section 2 and the tank mix partner label.
Crop Treatment Stage:	This recommendation applies only to minimum or zero till situations **before** emergence of the crop. Application can be made just prior to or immediately after seeding. Under no circumstances should application be made after crop emergence. Weeds in the seedling stage are most susceptible. This treatment should only be used for minimum or zero-tillage cropping systems in wheat, barley and oats.

Application Method:	Ground application only. DO NOT apply using aerial application equipment. Apply in 100 litres of **clean** water per hectare at a pressure of 275 kPa. See Section 3.
Application Rate:	1.2 L/ha + 400 g a.i./ha glyphosate*. A non-ionic surfactant is recommended for use with glyphosate. **Certitude B** should be added to the spray tank first, agitate then add glyphosate, agitate and then add surfactant.

* Equal to 1.1 L/ha of glyphosate 360 g/L, 0.9 L/ha of glyphosate 450 g/L, or, 0.75 L/ha of glyphosate 540 g/L.

SECTION 16

PRE-SEEDING BURNDOWN

Certitude B + Aim EC Herbicide for Burndown Control of Volunteer Canola (All Types)

Apply **Certitude B** at 600 mL per hectare in combination with Aim EC Herbicide at 36.5 – 73 mL per hectare. Registered glyphosate products can be added to this tank mix at 450-900 g a.e./ha.

Certitude B + Aim EC Herbicide will control volunteer canola (all types including Liberty Link, Clearfield, and Roundup Ready) from cotyledon stage up to the 4-leaf stage.

Use 100 L/ha water and ensure good coverage for maximum performance.

No adjuvant required when using this tank-mix with glyphosate.

SECTION 17

CANOLA – prior to planting

Certitude B + Roundup WeatherMAX with Transorb 2 Technology Liquid Herbicide	
Weeds Controlled:	Control of volunteer canola (all types) in addition to control of emerged weeds listed on both of these labels when applied as directed. See Section 2, plus weeds indicated on the Roundup WeatherMAX with Transorb 2 Technology Liquid Herbicide label.
Crop Treatment Stage:	Preseed /preplant
Application Method:	Apply in 100 L of water per hectare.
Application Rate:	1.5 L/ha of **Certitude B** + 0.83 -1.27 L/ha (annual weeds) or 1.67-3.33 L/ha (perennial weeds) of Roundup WeatherMAX with Transorb 2 Technology Liquid Herbicide

Note: Add **Certitude B** to the spray tank first, agitate well, then add Roundup WeatherMAX with Transorb 2 Technology Liquid Herbicide, agitate well. Refer to the Roundup WeatherMAX with Transorb 2 Technology Liquid Herbicide label for instructions, precautions and limitations.

SECTION 18

SAFETY INFORMATION

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN.

POTENTIAL SKIN SENSITIZER.

WARNING POISON.

Do not get into eyes, on skin or on clothing. Store the container, tightly closed, away from seeds, fertilizer, plants and foodstuffs. Wash concentrate from skin or eyes immediately. Do not inhale spray mist. After use wash hands and other exposed skin. Avoid spray drift onto crops other than those recommended. Avoid contamination of ponds, streams, rivers and other water sources. Wear goggles or a face shield during mixing/loading operations.

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

Ground applications: Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, clean-up and repair. Wear a long-sleeved shirt and long pants, chemical resistant gloves, and socks plus shoes during applications. Gloves are not required during application within a closed cab.

Aerial applications — the field crew and the mixer/loaders: Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, clean-up and repair.

Aerial applicators: Wear a long-sleeved shirt, long pants, socks and shoes during application. Gloves are not required during application within a closed cockpit. Do not allow the pilot to mix chemicals to be loaded onto the aircraft.

Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. DO NOT reuse them.

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours unless noted below:

CROP	POST-APPLICATION ACTIVITY	REI
Garlic	Irrigation, handset	2 days
	All other activities	24 hours
Sweet Corn	Irrigation, handset	5 days
	Harvest, hand	20 days
	All other activities	24 hours

DO NOT apply this product in a way that this product will contact workers or other persons, either directly or through drift. Only handlers wearing personal protective equipment may be in the area being treated during application.

ENVIRONMENTAL PRECAUTIONS

Toxic to aquatic organisms and 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 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.

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.

PRE-HARVEST GRAZING INTERVALS
(wheat, barley, oats and seedling alfalfa)

Do not use treated crops for grazing of livestock or green feed until 30 days after application of **Certitude B**. Do not cut treated crops for forage until 30 days after application of **Certitude B**.

CAUTION
Do not graze other treated crops or cut for hay, unless specified above; sufficient data are not available to support such use.

FIRST AID

In case of Ingestion: 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.

In case of Eye Contact: 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.

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.

In case of Inhalation: 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.

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

TOXICOLOGICAL INFORMATION

This product contains PETROLEUM DISTILLATES. Vomiting may cause aspiration pneumonia. Treat symptomatically.

STORAGE CONDITIONS

Certitude B will solidify below minus 20°C but will become usable at temperatures above 0°C. Insecticides and fungicides should be segregated from herbicides so as to prevent the possibility of cross-contamination.

SHAKE WELL BEFORE USING.

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 rinsing 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.

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