Approved English Label
Sub. No. 2026-4045
2026-10-30

GROUP	10	HERBICIDE

syntheSIZE 280HE™

SOLUTION

FOR SALE FOR USE IN THE PRAIRIE PROVINCES AND INTERIOR OF BRITISH COLUMBIA ONLY (INCLUDING, PEACE RIVER REGION)

COMMERCIAL

ACTIVE INGREDIENT: glufosinate-ammonium.....280 g/L

REGISTRATION NUMBER 35033

PEST CONTROL PRODUCTS ACT

IN CASE OF EMERGENCY ENDANGERING LIFE OR PROPERTY INVOLVING THIS PRODUCT, CALL DAY OR NIGHT AT 1-613-996-6666

READ THE LABEL AND ATTACHED BROCHURE BEFORE USING

Rath Holdco Inc.
346 Brighton Gate
Saskatoon, Saskatchewan
S7V 0P9
Canada

Product Information: 1-888-466-0056

NET CONTENTS: 1 to 1000 L

PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN. DO NOT get in eyes, on skin or on clothing. Avoid breathing spray mist. Wash thoroughly after using and before eating, drinking or smoking.

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

- Avoid spray drift to susceptible plants and USE ONLY FOR RECOMMENDED PURPOSES AND AT RECOMMENDED RATES.

- Apply only to agricultural crops when the potential for drift to areas of human habitation and 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.

Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair (unless otherwise specified below) and a respirator with a NIOSH-approved organic-vapour-removing cartridge (with a prefilter) approved for pesticides, or a NIOSH-approved canister approved for pesticides. In addition, wear protective eyewear (goggles or face shield) during mixing, loading, clean-up and repair. Gloves are not required during application within a closed cab and/or cockpit.

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

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 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.

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 treatment advice

TOXICOLOGICAL INFORMATION: Treat symptomatically. Medical personnel should contact CANUTEC collect at 1-613-996-6666 or *666 24 hours a day.

ENVIRONMENTAL PRECAUTIONS:

TOXIC to aquatic organisms and non-target terrestrial plants. Observe spray 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 filter strip between the treated area and the edge of the water body.

STORAGE: Store this product away from food or feed. CANNOT be stored below freezing. If stored for 1 year or longer, shake well before using. Store the tightly closed container away from feeds, seeds, fertilizers, plants and foodstuffs. Do not use or store in or around the home. Keep in original container during storage.

DISPOSAL:

Recyclable Container: 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/ territorial requirements.

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

Disposal of Unused, Unwanted Product: For information on disposal of unused, unwanted product, contact the manufacturer or the provincial/ territorial regulatory agency. Contact the manufacturer and the provincial/ territorial 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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syntheSIZE 280HE

Table of Contents:		***Section Number:***
GENERAL INFORMATION	The Product	1
SAFETY AND HANDLING	Precautions, Protective Clothing and Equipment	2
	First Aid and Toxicological Information	3
	Environmental Hazards	4
	Storage	5
	Disposal	6
DIRECTIONS FOR USE	**Post-Emergent Use: Crops, Weeds, Rates, Timing**	7
	Control in Canola	7.1
	Tank Mixes	8
	Desiccation Use: Crops, Weeds, Rates, Timing	9
	Application Instructions and Precautions	10
	Application Instructions for Use as a Desiccant	10.1
	Spray Buffer Zones	11
	Resistance Management Recommendations	12
	Mixing Instructions	13
	Sprayer Cleanup	14
	Livestock Feeding, Preharvest Intervals	15
	Notices	16

GENERAL INFORMATION

Section 1: The Product

- syntheSIZE 280HE is a non-selective herbicide. Avoid contact with desirable plants either from direct application or from spray drift as severe damage may occur.
- Crop injury may result if syntheSIZE 280HE is applied to a crop stressed by severe weather conditions, frost, drought, water-saturated soil, low fertility, disease or insect damage.
- syntheSIZE 280HE works primarily as a contact herbicide. Thorough coverage of the plant tissue to be desiccated or controlled is essential.
- syntheSIZE 280HE breaks down rapidly in the soil.
- syntheSIZE 280HE provides control of a broad spectrum of grassy and broadleaf weeds in Canola varieties or hybrids that are specially developed to be tolerant to glufosinate ammonium.
- syntheSIZE 280HE is registered for aerial and ground use on glufosinate ammonium tolerant Canola varieties or hybrids, i.e., varieties or hybrids labelled with LibertyLink®.
- syntheSIZE 280HE may also be applied to glufosinate ammonium tolerant lines or varieties grown for seed production.
- For hybrid seed production in canola, syntheSIZE 280HE may be used to remove segregating wild type plants within the female population. Two applications are required to do this. A third application may be necessary if it is determined that the segregating wild type plants are not fully removed from the field.
- Glufosinate ammonium tolerant Corn can be used as separator rows in hybrid Canola seed production, but must be destroyed and not used for food or feed.
- syntheSIZE 280HE will also desiccate weeds present in the field at application.
- syntheSIZE 280HE may be used as a harvest aid (desiccant) in Roundup Ready® canola with the pod shatter reduction trait.
- Desiccation of crops and weeds will be best when environmental conditions are favourable (warm temperatures, good moisture conditions, high humidity).
- The speed of action of syntheSIZE 280HE is influenced by environmental factors. At cool temperatures (below 10°C), poor moisture and low humidity, speed of action may be reduced. Generally, visual symptoms appear 2 to 4 days after application.
- When a rate range is given the higher rate should be utilized:
    1. when crop or weed growth is dense.
    2. when the weeds are large and/or mature - i.e., advanced leaf stages and plant height;
    3. when environmental conditions are cool and dry.
- Refer to Post Emergent Use section on canola for weeds controlled.

SAFETY AND HANDLING

Section 2: Precautions, Protective Clothing and Equipment

PRECAUTIONS:

- KEEP OUT OF REACH OF CHILDREN.
- This product may cause mild eye irritation.
- Avoid contact with eyes, skin or clothing. Harmful or fatal if absorbed through the skin.
- DO NOT get in eyes, on skin or on clothing.
- Avoid breathing spray mist. Harmful if swallowed.
- Wash thoroughly after using and before eating, drinking or smoking.
- Workers should not enter treated fields within 24 hours of treatment. Workers who must enter fields within this time period should wear long-sleeved shirt, long pants and chemical resistant gloves.
- Apply only to agricultural crops when the potential for drift to areas of human habitation and 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.

Protective Clothing and Equipment:

- Change contaminated clothing daily and wash before reusing.
- Rinse gloves with soap and water before removal, and wash hands thoroughly after using, and before eating, drinking or smoking.
- Clean protective equipment daily.

Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair (unless otherwise specified below) and a respirator with a NIOSH-approved organic-vapour-removing cartridge (with a prefilter) approved for pesticides, or a NIOSH-approved canister approved for pesticides. In addition, wear protective eyewear (goggles or face shield) during mixing, loading, clean-up and repair. Gloves are not required during application within a closed cab and/or cockpit.

Section 3: First Aid and Toxicological Information

FIRST AID:

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

- **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 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.
- **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 treatment advice.

TOXICOLOGICAL INFORMATION:

Treat symptomatically. Medical personnel should contact CANUTEC collect at 1-613-996-6666 or *666, 24 hours a day.

Section 4: Environmental Precautions

- TOXIC to aquatic organisms and non-target terrestrial plants. Observe spray 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 filter strip between the treated area and the edge of the water body.

Section 5: Storage

- Store this product away from food or feed.
- Do not store below freezing.
- If stored for 1 year or longer, shake well before using.
- Store the tightly closed container away from feeds, seeds, fertilizers, plants and foodstuffs.
- Do not use or store in or around the home.
- Keep in original container during storage.

Section 6: Disposal

Recyclable Container: 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/ territorial requirements.

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

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

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.

This product may be tank mixed with a fertilizer, a supplement, or with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions for Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact Rath Holdco Inc. at 1-888-466-0056 for information before applying any tank mix that is not specifically recommended on this label.

POST-EMERGENT USE

Section 7: Crops, Weeds, Rates, Timing

7.1: CANOLA

- syntheSIZE 280HE provides control of a broad spectrum of grassy and broadleaf weeds in Canola varieties and hybrids that are specially developed to be tolerant to glufosinate ammonium.
- syntheSIZE 280HE is registered for aerial and ground application to glufosinate ammonium tolerant Canola varieties or hybrids, i.e., varieties or hybrids labelled with LibertyLink®.
- syntheSIZE 280HE may also be applied to glufosinate ammonium tolerant Canola lines or varieties grown for seed production.
- **To assure crop safety and optimal herbicide performance, only use syntheSIZE 280HE on glufosinate ammonium tolerant (i.e., LibertyLink®) Canola grown from certified seed.**
- syntheSIZE 280HE is not registered for use on other glufosinate ammonium tolerant crops.
- **Application of syntheSIZE 280HE to non-tolerant Canola varieties or hybrids or other non-tolerant crops will result in severe crop injury or death of the crop.**
- Apply syntheSIZE 280HE from the cotyledon stage up until, but prior to, the early bolting stage of Canola.
- Slight discoloration of the Canola may be visible after application. This effect is

temporary and will not influence crop growth, maturity or yield.

- **For hybrid seed production** - Two applications are required to remove the segregating wild type plants. The first application should occur when the Canola is in the 2-4 leaf stage, the second application when the Canola plants are in the 4-6 leaf stage and the third application, if necessary, may be applied to the Canola up until, but prior to, the bolting stage. All applications of syntheSIZE 280HE for hybrid seed production should be made at 1.78 L/ha.

SUSCEPTIBLE WEEDS: syntheSIZE 280HE has an effect on all weeds and crops except for those crops which are developed to be tolerant to applications of syntheSIZE 280HE. The following weeds are susceptible to application of syntheSIZE 280HE. Best control will be obtained when syntheSIZE 280HE is applied in the recommended leaf stages.

WEED	RECOMMENDED WEED LEAF STAGE								RATE
	1	2	3	4	5	6	7	8	0.71 L/ha
Cow Cockle	----------|								
Green Foxtail	----------| Maximum 3 tillers								

WEED	RECOMMENDED WEED LEAF STAGE								RATE
	1	2	3	4	5	6	7	8	1.07 L/ha
Barnyard Grass	----------|								
Lady’s-thumb	----------|								
Lamb’s-quarters	----------|								
Russian Thistle	Up to 8 cm height								
Smartweed	----------|								
Stinkweed	----------|								
Volunteer Flax	Up to 6 cm height								
Wild Mustard	----------|								

WEED	RECOMMENDED WEED LEAF STAGE								RATE
	1	2	3	4	5	6	7	8	1.43 L/ha
Canada Thistle[1]	Up to 10 cm height								
Common Chickweed	----------| Leaf Pairs								
Hemp-nettle	----------| Leaf Pairs								
Kochia	Up to 8 cm height								
Perennial Sow Thistle	----------|								
Quackgrass[1]	----------|								
Redroot Pigweed	----------|								
Round-leaved Mallow	----------|								
Scentless Chamomile	Up to 10 cm height								
Shepherd’s-purse	----------|								

Volunteer Barley[2]	----------| Maximum 2 tillers	
Volunteer Wheat	----------| Maximum 2 tillers	
Wild Buckwheat	----------|	

WEED	RECOMMENDED WEED LEAF STAGE								RATE
	1	2	3	4	5	6	7	8	1.78 L/ha
Cleavers	----------| Whorls								
Dandelion	1-15 cm rosette								
Flixweed	Up to 10 cm height								
Hemp-nettle	----------| Leaf Pairs								
Quackgrass[3]	----------|							
Stork's-bill	----------|							
Wild Oats	----------| Maximum 2 tillers								

WEED	RECOMMENDED WEED LEAF STAGE								RATE
	1	2	3	4	5	6	7	8	1.78 L/ha
Heavy Populations									
Canada Thistle[1]	Up to 10 cm height								
Quackgrass[1]	----------|								
Volunteer Barley[2]	----------| Maximum 2 tillers								
Volunteer Wheat	----------| Maximum 2 tillers								
Wild Buckwheat	----------|								

WEED	RECOMMENDED WEED LEAF STAGE								RATE
	1	2	3	4	5	6	7	8	2.14 L/ha
Canada Thistle[4]	Up to 10 cm height								
Quackgrass[5]	----------|								

[1]Top Growth Suppression Only
[2]Suppression Only
[3]Improved Top Growth Control
[4]Better Top Growth Suppression
[5]Season Long Control for Heavy Populations

SECOND APPLICATION

- A second application of syntheSIZE 280HE can be made to fields treated initially with up to 2.14 L/ha if new weed germination or growth is present.
- A first application of up to 2.14 L/ha may be followed by a second application of up to 1.78 L/ha,

OR

A first application of up to 1.78 L/ha may be followed by a second application of up to 2.14 L/ha.

- **Do not apply more than a total of 3.93 L/ha per year**.
- Apply when the new weed growth is in the correct leaf stage and up to early bolting stage of Canola.

THIRD APPLICATION: FOR HYBRID SEED PRODUCTION ONLY

- Three applications of syntheSIZE 280HE, each at 1.78 L/ha, may be required for hybrid seed production. The third application must occur prior to bolting of the Canola crop.
- For best results, apply to emerged, young, actively growing weeds. Weeds that emerge

after application will not be controlled.

- syntheSIZE 280HE will have an effect on weeds that are larger than the recommended leaf stage, however speed of activity and control may be reduced.

Use of Corn separator rows in hybrid Canola seed production

- syntheSIZE 280HE is registered for use on glufosinate ammonium tolerant Corn varieties or hybrids when used as separator rows.
- Corn should be seeded at 20,000 - 30,000 plants/ha.
- Row spacing for glufosinate ammonium tolerant Corn should be 18-23 cm.
- **Note:** Corn must be destroyed and not used for food or feed.

Rate Range:

- Where a rate range is given use the higher rate when:

1. the crop or weed growth is dense.
2. the weeds are large and/or mature.
3. the environmental conditions are cool and dry.

Timing:

- For best results, apply to emerged, young actively growing weeds. Weeds that emerge after application will not be controlled.
- Weeds will be best controlled when environmental conditions are favourable (warm temperatures, good moisture conditions, high humidity).

Section 8: Tank Mixes

- Do not apply syntheSIZE 280HE in any tank mix in glufosinate ammonium-tolerant canola hybrid seed production.
- For enhanced activity, syntheSIZE 280HE may be tank mixed with the following products:

CANOLA

TANK MIX PRODUCT	RATE	DIRECTIONS
Centurion® Emulsifiable Concentrate Post-emergence Herbicide or Select® Emulsifiable Concentrate Post-emergence Herbicide	63 mL/ha	For control of Volunteer Barley and Wild Oats, apply syntheSIZE 280HE at a rate of 1.43-2.14 L/ha plus Centurion Emulsifiable Concentrate Post-emergence Herbicide or Select Emulsifiable Concentrate Post-emergence Herbicide at 63 mL/ha with adjuvant as recommended on the Centurion Emulsifiable Concentrate Post-emergence Herbicide or Select Emulsifiable Concentrate Post-emergence Herbicide label. Apply when the weeds are in the 1-4 leaf stage with a maximum of 2 tillers.
Advantage Clethodim 240	63 mL/ha	For control of wild oats, green foxtail, volunteer barley, volunteer wheat, volunteer oats plus all remaining grass weeds and broadleaf weeds listed on the syntheSIZE 280HE label, apply syntheSIZE 280HE at a rate of 1.43-2.14 L/ha plus Advantage Clethodim 240 at 63 mL/ha with Advantage Clethodim Adjuvant, respectively, at 0.5% v/v. Apply when the wild oats, volunteer wheat, volunteer oats and green foxtail are in the 1-5 leaf stage. Refer to the syntheSIZE 280HE label for application timing on all remaining grass and broadleaf weeds for 1.43-2.14 L/ha.
Ingenious Herbicide	62 g/ha	Improved cleavers control in canola may be accomplished using a rate of 62 g/ha when tank mixed with syntheSIZE 280HE at a rate of 1.78 L/ha on LibertyLink® Canola, or Ingenious Herbicide applied with glyphosate products (360 g/L acid equivalent (ae) isopropylamine salt formulations or 540 g ae/L potassium salt formulations) at a rate of 667 g ae/ha on Roundup Ready® Canola. All glyphosate products must be registered for post-emergent use on glyphosate tolerant canola varieties. Application should be made from the 2 to 6 leaf stage of the canola crop when cleavers are between the cotyledon to 3 whorls stage.

DESICCATION USE

Section 9: Crops, Weeds, Rates, Timing

- syntheSIZE 280HE MAY BE USED AS A DESICCANT IN THE FOLLOWING CROPS:
  - CANOLA (only Roundup Ready® canola with the pod shatter reduction trait)
- syntheSIZE 280HE will also desiccate weeds, which are present in the field at time of application (Wild Buckwheat may not be completely desiccated).
- Desiccation of the crop and weeds will be best when environmental conditions are favourable (warm temperatures, good moisture conditions, high humidity).
- For application instructions, refer to Section 10.1.

CROP	RECOMMENDATIONS	RATE
CANOLA (only Roundup Ready®	Apply when the crop is in the 30-40% seed turn (green	1.07-1.45 L/ha

canola with the pod shatter reduction trait)	to brown) stage. Use the high rate when the crop canopy is very dense and/or there are high populations of weeds present at application. DO NOT harvest treated crop within 5 days after application. DO NOT apply more than once per year.	

Section 10: Application Instructions and Precautions

Application Instructions:

- The speed of action of syntheSIZE 280HE is influenced by environmental factors. At cool temperatures (below 10° C), poor moisture and low humidity, the speed of action may be reduced. Generally, visual symptoms appear 2-4 days after application.
- For best results, apply to emerged, young, actively growing weeds. Weeds that emerge after application will not be controlled.
- syntheSIZE 280HE will have an effect on weeds that are larger than the recommended leaf stage; however, speed of activity and control may be reduced.
- syntheSIZE 280HE works primarily as a contact herbicide. Uniform, thorough coverage of the plant tissue to be desiccated or controlled is essential to achieve consistent efficacy. Better coverage will be achieved with higher spray volumes.
- When a rate range is given the higher rate should be utilized:
  1. when the weed or crop growth is dense;
  2. when the weeds are large and/or mature – i.e., advanced leaf stages and plant height;
  3. when the environmental conditions are cool and dry.
- Refer to appropriate sections above for plant tissue to be desiccated or controlled.
- syntheSIZE 280HE must be applied in properly maintained and calibrated spray equipment that is capable of providing rates and volumes as recommended.

GROUND APPLICATION INSTRUCTIONS

- Ensure that all circuits (pipes, booms etc.) have the correct syntheSIZE 280HE water concentration before application is started.
- Apply syntheSIZE 280HE in a minimum of 110 L/ha of water, at a pressure of 275 kPa and at a ground speed of 6-8 km/h. If check valves are used, apply at 310 kpa. The use of 80° or 110° flat fan nozzles is highly recommended for optimum spray coverage and canopy penetration.
- Application of the spray at a 45° angle forward will result in better spray coverage. Refer to Sections 7, 8 (Post-emergent) and 9 (Desiccation) for the correct rate and timing of application.
- For desiccation uses only, where the crop canopy is dense or weed growth is heavy, achieve better spray coverage with higher spray volumes. Under these conditions, apply syntheSIZE 280HE in a minimum of 170-220 L/ha of water. Refer to Aerial Application for appropriate aerial water volumes.

AERIAL APPLICATION INSTRUCTIONS

- EXERCISE EXTREME CAUTION DURING THE AERIAL APPLICATION OF ANY INSECTICIDE, HERBICIDE OR FUNGICIDE. Drift of pesticides is not always visible with the human eye. Small droplets may drift into sensitive areas without obvious signs of danger. FOLLOW THESE DIRECTIONS PRECISELY!
- When applying syntheSIZE 280HE by aircraft, uniform spray coverage is essential. Applicators are required to use the correct combination of spray nozzle tips, nozzle placement and spray pressures, which will provide a COARSE droplet size distribution, with a volume mean diameter greater than 350 microns. DO NOT USE

RAINDROP NOZZLES. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

- **Post-emergent Use in Glufosinate Ammonium Tolerant Canola Water Volume:** Apply syntheSIZE 280HE in a minimum of 55 L/ha of water only.

Aerial drift is increased under certain meteorological conditions. Do not apply syntheSIZE 280HE by aircraft when the wind speed is greater than 12 km/h.

Application Precautions:

- Crop injury may result if syntheSIZE 280HE is applied to a crop stressed by severe weather conditions, frost, drought, water-saturated soil, low fertility, disease or insect damage.
- Weed control may be reduced when heavy dew, fog or mist is present at the time of application.
- syntheSIZE 280HE is a non-selective herbicide and has the potential to desiccate, defoliate or kill all green plants.
- Avoid contact with desirable plants either from direct application or from spray drift as severe damage may occur.
- **Application of syntheSIZE 280HE to non-tolerant Canola varieties, hybrids or other non-tolerant crops will result in severe crop injury or death of the crops.**
- **To assure crop safety and optimal herbicide performance, only use syntheSIZE 280HE on glufosinate ammonium tolerant (i.e., LibertyLink®) Canola grown from certified seed.**
- Avoid spraying when wind conditions are such that drift may occur to non-target plants.
- To avoid drift, keep the spray nozzle as low as possible, and spray during calm weather conditions.

Plant-back Intervals:

- No plant-back interval is required for field corn, canola and soybeans, dry common beans (not grown for seed), alfalfa, carrot, lettuce, onion and potato.
- 70 days for buckwheat, barley, millet, oats, rye, sorghum, triticale and wheat.
- 120 days for all other crops

Ground Application Precautions:

- 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.
- DO NOT apply if winds exceed 16 km/h when using open boom sprayers for ground application.
- DO NOT apply if winds exceed 25 km/h when using hooded sprayer for ground application.
- Do not use flood jet nozzles, controlled droplet application equipment or air-assisted spray equipment.

Aerial Application:

- 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 12 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 S572.1) coarse classification. Reduce drift caused by turbulent wingtip vortices. Nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wingspan or rotorspan.

  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. The pilot is allowed to load premixed chemicals with a closed system.

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

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 Rath Holdco Inc. at 1-888-466-0056 or obtain technical advice from the distributor or your provincial agricultural representative.

Rainfast Period:

- **If rainfall occurs within 4 hours of application, effectiveness may be reduced.**

10.1: Application Instructions for Use as a Desiccant

Ground application only: Apply syntheSIZE 280HE in a minimum of 110 L/ha of water at a pressure of 275 kPa and at a ground speed of 6-8 km/h. If check valves are used, apply at 310 kPa. The use of 80° or 110° flat fan nozzles is recommended for optimum spray coverage and canopy penetration.

Where crop canopy is dense, or weed growth is heavy, better spray coverage will be achieved with higher spray volumes. Under these conditions, apply 170-220 L/ha of water.

Section 11: Spray Buffer Zones

A spray buffer zone is NOT required for:

- uses with handheld application equipment permitted on this label,
- low-clearance hooded or shielded sprayers that prevent spray contact with crop, fruit or foliage.

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), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands).

Method of Application	**Crop**		**Spray Buffer Zones (metres) Required for the Protection of:**		
			Freshwater Habitat of Depths:		**Terrestrial Habitat**
			Less than 1 m	**Greater than 1 m**	
Field Sprayer	Canola		1	0	1
Aerial	Canola	Fixed wing	1	0	30
		Rotary	1	0	30

		wing			

When tank mixes are permitted, 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 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 portion of the Canada.ca website.

Section 12: Resistance Management Recommendations

For resistance management, syntheSIZE 280HE is a Group 10 herbicide. Any weed population may contain or develop plants naturally resistant to syntheSIZE 280HE and other Group 10 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 syntheSIZE 280HE or other Group 10 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 Rath Holdco Inc. at 1-888-466-0056.

Section 13: Mixing Instructions

syntheSIZE 280HE must be applied with properly calibrated clean equipment.

syntheSIZE 280HE is specially formulated to mix readily in water. Prior to adding syntheSIZE 280HE to the spray tank, ensure that the spray tank is thoroughly clean (see "CLEANING INSTRUCTIONS").

1. Fill tank one-half full of clean water prior to adding syntheSIZE 280HE.

2. Add the correct amount of syntheSIZE 280HE.

3. Add the remaining amount of water, begin agitation, and spray out immediately.

TANK-MIXES:

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.

NOTE: When tank mixing syntheSIZE 280HE, always add the tank mix partner to the tank *first*, ensure that it is thoroughly mixed, *and then* add syntheSIZE 280HE.

NOTE: Ensure that all circuits (pipes, booms, etc.) have the correct syntheSIZE 280HE /water concentration before application is started.

syntheSIZE 280HE and Centurion Emulsifiable Concentrate Post-emergence Herbicide or Select Emulsifiable Concentrate Post-emergence Herbicide: Glufosinate Ammonium Tolerant Canola only

When tank mixing syntheSIZE 280HE and Centurion Emulsifiable Concentrate Post-emergence Herbicide or Select Emulsifiable Concentrate Post-emergence Herbicide, always add Amigo Adjuvant to the tank first, then add syntheSIZE 280HE to the tank followed by Centurion Emulsifiable Concentrate Post-emergence Herbicide or Select Emulsifiable Concentrate Post-emergence Herbicide.

NOTE: The addition of an anti-foaming agent may reduce foaming, especially when using soft water.

Mixing Instructions:

1. Thoroughly clean the sprayer by flushing the system with water containing detergent.
2. Fill clean spray tank half full with clean water. Start agitation system.
3. Add the correct amount of Amigo Adjuvant. Continue to agitate until Amigo Adjuvant is thoroughly mixed.
4. STOP agitation. Add the required amount of syntheSIZE 280HE to the spray tank. Start agitation system.
5. Add the correct amount of Centurion Emulsifiable Concentrate Post-emergence Herbicide or Select Emulsifiable Concentrate Post-emergence Herbicide along with the remaining amount of water necessary to fill the spray tank.
6. Continue to agitate or run the by-pass system, and spray out immediately.
7. After any break in the spraying operation, agitate thoroughly before spraying again. Check inside the tank to ensure that sprayer agitation is sufficient to remix the spray materials. Do not allow the mixture to sit overnight.
8. If an oil film starts to build up in the tank, drain it and clean tank with strong detergent solution.
9. Immediately after use, thoroughly clean the sprayer by flushing the system with water containing detergent (see Section 14, “Sprayer Cleanup”).

syntheSIZE 280HE and Advantage Clethodim 240: Glufosinate Ammonium Tolerant Canola only (i.e., varieties or hybrids labelled LibertyLink®)

Advantage Clethodim 240 may be tank-mixed with syntheSIZE 280HE for control of certain broadleaf and grass weeds in glufosinate ammonium tolerant canola varieties in one spray operation.

Follow all precautions, limitations and timing recommendations on the syntheSIZE 280HE label.

Mixing Instructions:

1. Thoroughly clean the sprayer by flushing the system with water containing detergent.
2. Fill clean spray tank half full with clean water. Start agitation system.
3. Add the required amount of Advantage Clethodim Adjuvant to the tank. Continue to agitate until thoroughly mixed.
4. STOP agitation. Add the correct amount of syntheSIZE 280HE to the spray tank. Start agitation system.

5. Add the correct amount of Advantage Clethodim 240 along with the remaining amount of water necessary to fill the spray tank.
6. Continue to agitate or run the by-pass system and spray out immediately.
7. After any break in the spraying operation, agitate thoroughly before spraying again. Check inside the tank to ensure that sprayer agitation is sufficient to re-mix the spray materials. Do not allow the mixture to sit overnight. In the case of tank mixtures with broadleaf herbicides, settling will occur if agitation is not continuous.
8. If an oil film starts to build up in the tank, drain it and clean tank with strong detergent solution.
9. Immediately after use, thoroughly clean the sprayer by flushing the system with clean water containing detergent.

Section 14: Sprayer Cleanup

CLEANING INSTRUCTIONS

- Before and after using syntheSIZE 280HE always complete a thorough cleaning of the spray tank, lines and filter. Spray equipment should be thoroughly rinsed using a strong detergent solution.
- When using tank mixes, consult the tank mix product label for additional cleanup instructions.

Section 15: Livestock Feeding and Pre-Harvest Intervals

LIVESTOCK FEEDING
Canola:
- Grain and meal from treated crop can be fed to livestock.
- CAUTION: Do not graze the treated crop or cut for hay.

Corn (used as separator rows in Hybrid Canola Seed Production):
- Do not feed treated crop to livestock.

PRE-HARVEST INTERVALS (PHI):

Canola:
- When syntheSIZE 280HE is tank mixed with Centurion Emulsifiable Concentrate Post-emergence Herbicide or Select Emulsifiable Concentrate Post-emergence Herbicide, observe a PHI of 60 days from the date of treatment (or last treatment when a second application has been made).
- When syntheSIZE 280HE is tank mixed with Advantage Clethodim 240, observe a PHI of 60 days from the date of treatment.
- When syntheSIZE 280HE is tank mixed with Ingenious Herbicide, observe a PHI of 60 days from the date of treatment.

Section 16: Notices

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.

FOR MORE INFORMATION CONTACT:
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