GROUP 4 15 HERBICIDES

Tavium® plus VaporGrip® Technology Herbicide

COMMERCIAL (AGRICULTURAL)

CAPSULE SUSPENSION

Foliar systemic broadleaf herbicide with residual grass and certain broadleaf weed control for use in Roundup Ready 2 Xtend® soybean

ACTIVE INGREDIENTS:

Contains 1,2-benzisothiazolin-3-one at 0.015%, 5-chloro-2-methyl-4-isothiazolin-3-one at 0.0009%, 2-methyl-4-isothiazolin-3-one at 0.0003% and 2-bromo-2-nitropropane-1,3-diol at 0.02% OR 5-chloro-2-methyl-4-isothiazolin-3-one at 0.001%, 2-methyl-4-isothiazolin-3-one at 0.0005% and 2-bromo-2-nitropropane-1,3-diol at 0.03% as preservatives.

READ THE LABEL AND BOOKLET BEFORE USING KEEP OUT OF REACH OF CHILDREN

NET CONTENTS: 1 L to bulk

REGISTRATION NO.: 33268

PEST CONTROL PRODUCTS ACT

Syngenta Canada Inc.

140 Research Lane, Research Park Guelph, Ontario N1G 4Z3 Telephone: 1-877-964-3682

LABEL

1.0 NOTICE TO USER

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

2.0 FIRST AID

IN CASE OF POISONING, contact a doctor or a poison control centre **IMMEDIATELY**. 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 further treatment advice.

3.0 TOXICOLOGICAL INFORMATION

There is no specific antidote. Treat symptomatically.

Dicamba may cause severe irritation to the eyes, and irritation to the skin and mucous membranes. Symptoms of exposure to dicamba may include dizziness, muscle weakness, loss of appetite, weight loss, vomiting, decreased heart rate, shortness of breath, excitement, tenseness, depression, incontinence, cyanosis, muscle spasms, exhaustion and loss of voice.

4.0 PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN.

May irritate eyes. Avoid contact with eyes.

Re-entry Intervals (REI): DO NOT enter or allow worker entry into the treated area until 12 hours after application.

DO NOT apply by air.

DO NOT use or store near heat or open flame. **DO NOT** apply beyond the field boundary.

Avoid breathing product and working in spray mist.

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.

If this pest control product is to be used on a commodity that may be exported to other countries in the world and you require information on acceptable residue levels in these countries, please contact Syngenta Canada Inc. at 1-87-SYNGENTA / 1-877-964-3682.

5.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

During mixing, loading, application, clean-up and repair, wear coveralls or a long-sleeved shirt and long pants, chemical-resistant gloves, socks, and enclosed boots. In addition, when mixing/loading, wear eye protection.

If pesticide gets inside, remove clothing/PPE immediately. Wash yourself thoroughly and put on clean clothing.

Wash the outside of gloves before removing. Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

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

While using product, do not eat, drink or use tobacco (including smoking).

All users should wash hands and shower thoroughly with soap and water after using Tavium[®] plus VaporGrip[®] Technology Herbicide before eating, drinking, chewing gum, using tobacco, applying cosmetics, or using the toilet.

Heavily contaminated or drenched clothing and other absorbent materials contaminated with this product should be discarded. Do not reuse them.

Wear freshly laundered clothes daily.

Do not wear contaminated shoes.

Wash clothing in detergent and hot water before reuse.

Store and wash all protective clothing separately from household laundry.

6.0 ENVIRONMENTAL PRECAUTIONS

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

Surface Runoff

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

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.

Leaching

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

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 (ASABE) category indicated on the labels for those tank mix partners.

Spray Drift Management - General Information

Use good pesticide practices and apply only when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, schools and parks is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings used for applications.

For the protection of non-target habitats, over-spray or drift to any body of water or other environmentally sensitive habitats must be avoided. The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

Refer to further details on Spray Drift Management and Application Requirements on the label below (Section 9.2).

7.0 STORAGE

Keep in original container, tightly closed, during storage. Store in a cool, dry, well-ventilated area away from feed and foodstuffs, and out of the reach of children and animals. To prevent contamination store this product away from food or feed. If frozen, mix product thoroughly prior

to use.

8.0 DISPOSAL

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.

Recyclable Containers:

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

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

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

For Refillable Bulk 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 use this container for any other purpose.

IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING, CALL 1-800-327-8633 (FASTMED)

Tavium® is a trademark of a Syngenta Group Company.

VaporGrip® and Xtend® are trademarks of Monsanto Technology LLC, Monsanto Canada, Inc. licensee.

GROUP 4 15 HERBICIDES

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REGISTRATION NO.: 33268
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PAMPHLET

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If pesticide gets inside, remove clothing/PPE immediately. Wash yourself thoroughly and put on clean clothing.

Wash the outside of gloves before removing. Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

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

While using product, do not eat, drink or use tobacco (including smoking).

All users should wash hands and shower thoroughly with soap and water after using Tavium[®] plus VaporGrip[®] Technology Herbicide before eating, drinking, chewing gum, using tobacco, applying cosmetics, or using the toilet.

Heavily contaminated or drenched clothing and other absorbent materials contaminated with this product should be discarded. Do not reuse them.

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6.0 ENVIRONMENTAL PRECAUTIONS

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

Surface Runoff

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

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.

Leaching

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

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 (ASABE) category indicated on the labels for those tank mix partners.

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Use good pesticide practices and apply only when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, schools and parks is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings used for applications.

For the protection of non-target habitats, over-spray or drift to any body of water or other environmentally sensitive habitats must be avoided. The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

Refer to further details on Spray Drift Management and Application Requirements on the label below (Section 9.2).

7.0 STORAGE

Keep in original container, tightly closed, during storage. Store in a cool, dry, well-ventilated area away from feed and foodstuffs, and out of the reach of children and animals. To prevent contamination store this product away from food or feed. If frozen, mix product thoroughly prior

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9.0 TAVIUM PLUS VAPORGRIP TECHNOLOGY HERBICIDE- PRODUCT INFORMATION

Tavium plus VaporGrip Technology Herbicide is a foliar systemic broadleaf herbicide with residual control of annual grass weeds and certain broadleaf weeds in Roundup Ready 2 Xtend® soybean (glyphosate and dicamba tolerant soybeans only).

This product needs 12.5 to 25 mm ($\frac{1}{2}$ to 1 inch) of either rainfall or irrigation in one event following application to activate residual weed control.

If rainfall or irrigation is not received within 10 days after application, residual weed control may be reduced.

Under these dry conditions, cultivate or use other weed control measures if weeds develop.

Rainfall or irrigation occurring within 4 hours after <u>postemergence</u> application may reduce effectiveness on emerged weeds.

9.1. General Precautions

- 1. Do not apply on or near desirable trees or plants, or in locations where chemical may be washed into contact with their roots.
- Apply Tavium plus VaporGrip Technology Herbicide when air temperature is between 10 and 25 °C for best results. Do not spray when the temperature is expected to exceed 30°C.
- 3. 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.
- 4. Do not treat areas where movement of the chemical into the soil or surface washing may bring Tavium plus VaporGrip Technology Herbicide into contact with the roots of desirable plants.
- 5. Crop damage can occur if Tavium plus VaporGrip Technology Herbicide is applied at any time other than the recommended crop stage.

NOTE: Crop injury may occur if application is made to crops that have been stressed by abnormally hot, humid or cold weather conditions, frost, low fertility, drought, water saturated soil, compacted soil, previous pesticide applications, disease or insect damage etc.

- 6. Do not use additives such as oil, wetting agents, emulsifiers, detergents, spreaders, sticking agents, or dispersing agents with Tavium plus VaporGrip Technology Herbicide unless otherwise specified.
- 7. Read and follow the label instructions for the tank-mix products noting pertinent recommendations, directions for use, restrictions or additional weeds controlled.
- 8. To avoid subsequent injury to other crops, thoroughly clean application equipment immediately after spraying. Ensure that all traces of Tavium plus VaporGrip Technology Herbicide are removed. See section on suggested procedure for cleaning spray equipment.

9.2. Spray Drift Management and Application Requirements

Tavium plus VaporGrip Technology Herbicide may cause injury to desirable trees and plants, particularly non-dicamba tolerant soybean, flowers, fruit trees, grapes, ornamentals, peas, potatoes, tomatoes, tobacco, and other broadleaf plants especially in their development and growing stage. Leave an adequate buffer zone between treatment areas and sensitive plants. Failure to follow the requirements in this label could result in severe injury or destruction to desirable sensitive crops and trees.

Do not allow herbicide solution to mist, drip, drift or splash onto desirable vegetation because severe injury or destruction to desirable broadleaf plants could result. The following drift management requirements must be followed to ensure application accuracy from ground application.

Controlling Droplet Size

The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see the

"Wind Speed and Direction","Temperature and Humidity" and "Temperature Inversions" sections of this label below).

- Nozzle type. Use only spray nozzles that produce Extremely Coarse to Ultra Coarse spray quality and minimal amounts of fine spray droplets as defined by the American Society of Agricultural and Biological Engineers (ASABE S-572.1). Do not use conventional flat fan nozzles that produce medium spray quality. Check nozzle manufacturer's recommendations to determine the proper droplet spectrum, operating pressure, boom height, nozzle spacing and ground speed that will deliver the desired Extremely Coarse to Ultra Coarse spray quality and spray volume of at least 100 L/ha.
- Spray Pressure. Adjust pressure for selected nozzles according to the nozzle manufacturer to maintain Extremely Coarse to Ultra Coarse spray quality. Use sufficient spray pressure with air induction nozzles to ensure a good spray pattern, while maintaining Extremely Coarse to Ultra Coarse spray quality and check this visually; use at least 207 kPa (30 psi) to ensure proper pattern overlap. Confirm that sprayer rate controller hardware (if so equipped) does not increase pressure above the desired range. Calibrate the flow rate for the selected nozzles on the equipment used to apply this product.
- **Spray Volume**. Apply this product in a minimum of 100 L/ha. Use a higher spray volume when treating dense vegetation. Higher spray volumes also allow the use of larger nozzle orifices (sizes) which produce coarser spray quality.
- **Equipment Ground Speed.** Select a ground speed under 25 km/h that will deliver the desired spray volume while maintaining the desired spray pressure. Slower speeds generally result in better spray coverage and deposition on the target area.
- **Spray boom Height.** Spray at the appropriate boom height based on nozzle selection and nozzle spacing, but do not exceed a boom height of 60 cm (24 inches) above target pest or crop canopy. Set boom to lowest effective height over the target pest or crop canopy based on equipment manufacturer's directions. Automated boom height controllers are recommended with large booms to better maintain optimum nozzle to canopy height. Excessive boom height will increase the potential for spray drift.

Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Avoid applications under conditions of high humidity or fog indicating the presence of a temperature inversion.

Temperature Inversions

- <u>Do not apply during a temperature inversion because off-target movement</u> potential is high.
- During a temperature inversion, the atmosphere is very stable and vertical air mixing is restricted, which causes small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common

during inversions.

- Temperature inversions are characterized by increasing temperatures with altitude and are common on evenings and nights with limited cloud cover and light to no wind.
- Cooling of air at the earth's surface takes place and warmer air is trapped above it.
 Temperature inversions begin to form as the sun sets and often continue into the morning.
- Their presence can be indicated by ground fog; however, if fog is not present, inversions
 can also be identified by the movement of smoke from a ground source or an aircraft
 smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under
 low wind conditions) indicates an inversion, while smoke that moves upward and rapidly
 dissipates indicates good vertical air mixing.
- The inversion will dissipate with increased winds (above 5 km/h) or at sunrise when the surface air begins to warm.

Wind Speed and Direction

- Drift potential is lowest between wind speeds of 5 to 15 km/h.
- If the wind speed is 5 km/h or less and fog is present, indicating a temperature inversion, do not apply this product.
- If fog is not present, conduct a smoke test. Smoke that moves upward confirms there is
 no inversion present whereas smoke that layers and moves laterally in a concentrated
 cloud, indicates a temperature inversion exists. Do not apply this product during a
 temperature inversion. Wait until the wind speed is greater than 5 km/h to ensure that
 any inversion has lifted.
- Do not spray this product at a wind speed greater than 15 km/h.
- For Tavium with VaporGrip Technology wind speed and direction restrictions see below table:

Wind Speed	Application conditions and restrictions	
< 5 km/h	Do not apply Tavium plus VaporGrip Technology Herbicide if	
	temperature inversion exists	
5 - 15 km/h	Optimum application conditions	
> 15 km/h	Do not apply Tavium plus VaporGrip Technology Herbicide	

NOTE: Local terrain can influence wind patterns. Every applicator must be familiar with local wind patterns and how they affect drift.

Sensitive Areas

This product should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for species at risk, or sensitive crop plants) is minimal (e.g. when the wind is blowing away from sensitive areas). Applicators should survey the surrounding area before making an application of this product.

Failure to follow the requirements in this label could result in severe injury or destruction to desirable sensitive crops and trees, particularly non-dicamba tolerant soybean, flowers, fruit trees, grapes, ornamentals, peas, potatoes, sunflowers, tobacco, tomatoes, and other broadleaf plants when contacting their roots, stems or foliage.

Application Awareness

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR.

The interaction of equipment and weather related factors must be monitored to maximize performance and on-target spray deposition. The applicator is responsible for considering all of these factors when making a spray decision.

10.0 DIRECTIONS FOR USE

10.1. General Precautions

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 Syngenta Canada Inc. at 1-87-SYNGENTA (1-877-964-3682) for information before applying any tank mix that is not specifically recommended on this label.

Syngenta Canada Inc. has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) of all potential tank-mixes under all environmental conditions or for all crop varieties. Tank mixes that are not specifically listed on this label should be tested on a small area first, under local conditions and using standard practices, to confirm the tank mix is suitable for widespread application.

To determine the physical compatibility of this product with other products, use a jar test.

Always read and follow label directions including WALES mixing order.

10.1.1. Additives and Tank Mix Precautions

Consult the labels of the tank-mix partners and observe the most restrictive precautions indicated on the labels of the products in the tank mixture.

<u>Do not tank mix products containing ammonium salts such as ammonium sulfate (AMS), urea ammonium nitrate, foliar fertilizers or glyphosate present as an ammonium salt.</u>

Nozzle selection is one of the most important parameters for drift reduction. A drift reduction additive may be used with this product to further reduce fine droplets.

Not all drift reduction additives are compatible with every nozzle type and pesticide/adjuvant combination. Check with the additive manufacturer to confirm that the drift reduction additive will

work properly with the spray nozzle, spray pressure and your specific spray solution.

Do not add acidifying buffering agents, acidic pH adjusting agents or adjuvants.

Do not use crop oil concentrates (COC) and methylated seed oils (MSO) as adjuvants when this product is applied with glyphosate-based agricultural herbicides.

<u>Field sprayer application:</u> **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 ASABE S572.1 Extremely Coarse to Ultra Coarse classification. Boom height must be 60 cm or less above the crop or ground.

DO NOT apply by air.

10.2. 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.

Buffer Zones Using ASABE Coarse Applications

Method of	Crop	Buffer Zones (metres) Required for the Protection of:				
application		Freshwater Habitat of Depths:		Estuarine Habitats o		Terrestrial habitat
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field sprayer ¹	Roundup Ready 2 Xtend® Soybeans ²	1	1	1	1	15

¹ For field sprayer application, buffer zones can be reduced with the use of drift reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy or ground, the labelled buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with cone-shaped shields that are no more than 30 cm above the crop canopy or ground, the labelled buffer zone can be reduced by 30%.

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.

10.3. Application Instructions

It is important to check the physical compatibility of tank mixed pesticide products in a small volume prior to filling the sprayer. Check the compatibility of tank mixes containing Tavium plus VaporGrip Technology Herbicide using a jar test with proportionate amounts of mix partners,

² For application to Dicamba Tolerant Soybeans, use nozzles that deliver Extremely Coarse to Ultra Coarse spray droplets.

and water, before mixing in the spray tank.

10.4. Mixing Instructions

- 1. Ensure that the sprayer interior is clean, then fill the spray tank with ½ the required amount of water and engage gentle agitation. Good agitation is indicated by a rippling or rolling action on the surface of the water.
- 2. Add any WG or DF formulation mix partners and agitate to ensure complete mixing.
- 3. Add Tavium plus VaporGrip Technology Herbicide and agitate to ensure complete mixing.
- 4. Add any SE or SC formulation mix partners and agitate to ensure complete mixing.
- 5. Add any EC formulation mix partners and agitate to ensure complete mixing.
- 6. Fill the tank to 3/4 the required amount of water.
- 7. Add any solution (SN or SL) formulation mix partners and agitate to ensure complete mixing.
- 8. Finish filling the sprayer with water, maintaining good agitation.
- 9. After any break in spraying operations, agitate thoroughly before spraying again.
- 10. Spray the pesticide suspension the same day as mixing.
- 11. Do not mix, load or clean spray equipment where there is a potential to contaminate wells or aquatic systems.

When using chemical handling equipment to fill the sprayer, the following additional recommendations apply:

- WG and DF formulations are preferentially batch mixed.
- SC, SN, and SL formulations may be inducted or batch mixed.
- EC formulations are preferentially batch mixed.

10.5. Sprayer Cleanup

To avoid subsequent injury to other crops, thoroughly clean application equipment immediately after spraying each day.

Ensure that all traces of the product are removed.

Do not allow residue to dry in spray tank.

Do not allow solution to remain in lines or tank overnight.

The following procedures are recommended:

- Drain and flush tank, boom and all hoses for several minutes with clean water. Ensure dead end lines are flushed. <u>Do not</u> clean the sprayer near desirable vegetation, wells or other water sources.
- 2. Prepare a cleaning solution of water/strong detergent or a commercial sprayer cleaner or ammonia.
- Be sure to wash all internal parts of the tank, including the inside top surface with the cleaning solution. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.

- 4. Flush hoses, spray lines and nozzles for at least one minute with the cleaning solution.
- 5. Repeat steps 2-4 for two additional times.
- 6. Remove nozzles, screens and strainers, and clean separately in the cleaning solution after completing the above procedures.
- 7. Drain lines, filters and sump.
- 8. Rinse the complete spraying system with clean water.
- 9. Dispose of all rinsate according to local and federal regulations.

10.6. Roundup Ready 2 Xtend® Soybeans

Apply Tavium plus VaporGrip Technology Herbicide pre-plant, pre-emergent or early post-emergent only to Roundup Ready 2 Xtend® soybean.

This product will cause severe crop injury or destruction if applied to soybeans that are not dicamba tolerant, including soybeans with a trait engineered to confer tolerance to other growth regulator herbicides other than dicamba.

Roundup Ready 2 Xtend [®] S the Crop	Soybeans – Pre-plant (up to 14 days before planting) or Pre-emergent to
PRODUCT RATE	4.15 L/ha
WEEDS CONTROLLED	Annual Grasses¹ (not emerged): Crabgrass (smooth, hairy), Barnyard Grass, Fall Panicum, Foxtail (green, yellow, giant), Old Witchgrass
	Annual Broadleaves¹ (not emerged): American Nightshade², Eastern Black Nightshade²
	Annual Broadleaves³ (emerged): Canada Fleabane, Cleavers, Common Ragweed⁴, Corn Spurry, Cow Cockle, False Ragweed, Giant Ragweed, Green Smartweed, Hare's-ear Mustard, Indian Mustard, Lady's-thumb, Lamb's-quarters⁴, Redroot Pigweed⁴, Russian Pigweed, Tartary Buckwheat, Tumble Mustard, Velvetleaf, Wild Buckwheat, Wild Mustard, Wormseed Mustard, Common and Tall Waterhemp (up to 4 leaf, including glyphosate resistant biotypes).
	Perennial Weeds (emerged): Canada Thistle, Perennial Sow Thistle, Field Bindweed
	Residual (Short Term) Broadleaf Weeds: Lamb's-quarters, Redroot Pigweed, Common Ragweed, Wild Buckwheat, Common and Tall Waterhemp (including glyphosate resistant biotypes) and Velvetleaf (suppression only)
APPLICATION METHOD	Ground application only. Apply in a minimum 100 L of water per hectare. Use Extremely Coarse to Ultra Coarse spray quality.
NOTES	¹ Apply in a tank-mixture with Roundup WeatherMAX® or other glyphosate products formulated as a potassium salt if annual grasses, American and Eastern Black Nightshade or other perennial weeds are emerged at application. Consult the glyphosate product label for proper weed specific use rates and precautions. ² Pre-emergent treatments sometimes give better residual control than preplant treatments (Nightshade species not emerged). ³ Apply in a tank-mixture with Roundup WeatherMAX® or other glyphosate product formulated as a potassium salt if these Annual Broadleaf weeds are > than 10 cm in height. Consult the glyphosate product label for proper weed specific use rates and precautions. ⁴ Includes atrazine resistant species.
	Do not tank mix Tavium plus VaporGrip Technology Herbicide with glyphosate products where glyphosate is present as an ammonium salt.

Roundup Ready 2 Xtend [®] Soybeans – Early Post-emergent to the Crop (up to and including the 2 nd trioliate soybean leaf stage)		
PRODUCT RATE	4.15 L/ha	
WEEDS CONTROLLED ¹	Annual Grasses¹: Crabgrass (smooth, hairy), Barnyard Grass, Fall Panicum, Foxtail (green, yellow, giant), Old Witchgrass Annual Broadleaves¹:	
	American Nightshade, Eastern Black Nightshade	
	Annual Broadleaves (emerged): Canada Fleabane, Cleavers, Common Ragweed², Corn Spurry, Cow Cockle, False Ragweed, Giant Ragweed, Green Smartweed, Hare'sear Mustard, Indian Mustard, Lady's-thumb, Lamb's-quarters², Redroot Pigweed², Russian Pigweed, Tartary Buckwheat, Tumble Mustard, Velvetleaf, Wild Buckwheat, Wild Mustard, Wormseed Mustard, Common and Tall Waterhemp (up to 4 leaf, including glyphosate resistant biotypes).	
	Perennial Weeds (emerged): Canada Thistle, Perennial Sow Thistle, Field Bindweed	
	Residual (Short Term) Broadleaf Weeds: Lamb's-quarters, Redroot Pigweed, Common Ragweed, Wild Buckwheat, Common and Tall Waterhemp (including glyphosate resistant biotypes) and Velvetleaf (suppression only)	
TANK-MIX PARTNER (RATE)	Roundup WeatherMAX® (1.67 L/Ha)	
APPLICATION METHOD	Ground application only. Apply in a minimum 100 L of water per hectare. Use Extremely Coarse to Ultra Coarse spray quality.	
NOTES	¹The tank-mixture of Roundup WeatherMAX® (or other glyphosate products formulated as a potassium salt) will control emerged annual grasses, American and Eastern Black Nightshade and other emerged perennial weeds. Apply when weeds are small, as control of annual weeds greater than 25 cm in height will be inconsistent, although some weeds may be controlled. Consult the glyphosate product label for weed species list and product use recommendations and precautions. ²Includes atrazine resistant species.	
	Do not tank mix Tavium plus VaporGrip Technology Herbicide with glyphosate products where glyphosate is present as an ammonium salt.	

11.0 PRE-HARVEST INTERVAL

CROP	PHI (days)
Roundup Ready 2 Xtend® Soybeans	90 days

CAUTION: Do not graze treated immature soybean crop or cut for hay. Sufficient data are not available to support such use.

12.0 RECROPPING GUIDELINES

Certain crops have been shown to be sensitive to low residues of Tavium plus VaporGrip Technology Herbicide in the soil. The minimum recropping interval is the time between the last application of Tavium plus VaporGrip Technology Herbicide and the anticipated date of planting of the next crop.

To avoid injury to subsequent crops after an application at the recommended rate of Tavium plus VaporGrip Technology Herbicide, the following recropping intervals should be observed.

CROP	MINIMAL RECROPPING INTERVAL
Corn, Roundup Ready 2 Xtend® Soybeans	No restriction
Barley, Oats, Rye, Wheat	4 ½ months
All other crops (including non-dicamba tolerant soybeans)	4 months

Observe the recropping guidelines of any product to be tank mixed with Tavium plus VaporGrip Technology Herbicide.

13.0 RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, Tavium plus VaporGrip Technology Herbicide is a Group 4 and 15 herbicide. Any weed population may contain or develop plants naturally resistant to Tavium plus VaporGrip Technology Herbicide and other Group 4 and/or 15 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 Tavium plus VaporGrip Technology Herbicide or other Group 4 and/or 15 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 and to report suspected resistance, contact company representatives at 1-87-SYNGENTA (1-877-964-3682) or at www.syngenta.ca.

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