

2020-06-12
Sub.No.2020-1059

GROUP	2	HERBICIDE
-------	----------	-----------

PINNACLE® Soybean SG Herbicide

SOLUBLE GRANULE

FOR SALE FOR USE ON SOYBEANS ONLY

AGRICULTURAL

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

ACTIVE INGREDIENT: Thifensulfuron methyl 50%

WARNING: CONTAINS THE ALLERGEN MILK

REGISTRATION NO. 30623 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 3.3 grams-25 Kg

FMC of Canada Limited
6755 Mississauga Road, Suite 204
Mississauga, ON L5N 7Y2
1-833-362-7722

PRECAUTIONS:

- **KEEP OUT OF REACH OF CHILDREN.**
- AVOID BREATHING SPRAY MIST.
- AVOID CONTACT WITH SKIN, EYES AND CLOTHING.
- DO NOT CONTAMINATE ANY BODY OF WATER.
- DO NOT APPLY BY AIR
- WEAR LONG-SLEEVED SHIRT, LONG PANTS, SOCKS, AND CHEMICAL-RESISTANT GLOVES AND FOOTWEAR DURING MIXING, LOADING, APPLICATION, CLEAN-UP AND REPAIR. CHEMICAL-RESISTANT GLOVES ARE NOT REQUIRED WHILE OPERATING GROUNDBOOM SPRAYERS.

FIRST AID:

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 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 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.

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

For medical emergencies call **1-800-331-3148** (24 hours).

TOXICOLOGICAL INFORMATION: Treat symptomatically.

STORAGE:

Store product in original container in a secure, dry area away from pesticides, fertilizers, food or feed. Not for use or storage in or around the home. Keep container tightly closed and dry.

DISPOSAL:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
3. Make the empty container unsuitable for further use.

4. Dispose of the empty container in accordance with provincial requirements.
5. For information on the disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of 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.

<<DFU Booklet>>

GROUP

2

HERBICIDE

PINNACLE® Soybean SG Herbicide

SOLUBLE GRANULE

FOR SALE FOR USE ON SOYBEANS ONLY

AGRICULTURAL

READ THE LABEL AND THIS BOOKLET BEFORE USING

ACTIVE INGREDIENT: Thifensulfuron methyl 50%

WARNING: CONTAINS THE ALLERGEN MILK

REGISTRATION NO. 30623 PEST CONTROL PRODUCTS ACT

NET CONTENTS:3.3G-25 Kg

PRECAUTIONS:

- **KEEP OUT OF REACH OF CHILDREN.**
- AVOID BREATHING SPRAY MIST.
- AVOID CONTACT WITH SKIN, EYES AND CLOTHING.
- DO NOT CONTAMINATE ANY BODY OF WATER.
- DO NOT APPLY BY AIR
- WEAR LONG-SLEEVED SHIRT, LONG PANTS, SOCKS, AND CHEMICAL-RESISTANT GLOVES AND FOOTWEAR DURING MIXING, LOADING, APPLICATION, CLEAN-UP AND

REPAIR. CHEMICAL-RESISTANT GLOVES ARE NOT REQUIRED WHILE OPERATING
GROUNDBOOM SPRAYERS.

FIRST AID:

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 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 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.

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

For medical emergencies call **1-800-331-3148** (24 hours).

TOXICOLOGICAL INFORMATION: Treat symptomatically.

APPLICATION PRECAUTIONS:

DO NOT APPLY BY AIR.

Injury to or loss of desirable trees or vegetation may result from failure to observe the following:

- Do not apply, drain or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.
- Do not use on lawns, walks, driveways, tennis courts or similar areas.
- Prevent drift of spray to desirable plants. Do not contaminate any body of water, including irrigation water that may be used on other crops.
- Carefully observe sprayer clean-up instructions, as spray tank residue may damage crops other than soybeans.
- Do not handle pesticides with bare hands. Chemical-resistant gloves significantly reduce hand exposure. Wear chemical-resistant gloves for mixing/loading/clean-up operations and when making sprayer and nozzle repairs and adjustments. Do not use leather or cloth gloves.
- Wear long-sleeved shirt, long pants, socks, and chemical-resistant gloves and footwear during mixing, loading, application, clean-up and repair. Chemical-resistant gloves are not required while operating groundboom sprayers.

PRODUCT DESCRIPTION:

PINNACLE® Soybean SG Herbicide is recommended for selective postemergence control of broadleaf weeds in soybeans. PINNACLE® Soybean SG Herbicide is in the form of a soluble granule to be mixed in water and applied as a uniform broadcast spray. It is noncorrosive, nonflammable, nonvolatile, and does not freeze.

PINNACLE® Soybean SG Herbicide must be applied with a recommended surfactant early postemergence to the main flush of actively growing weeds. Warm, moist growing conditions promote active weed growth and enhance the activity of PINNACLE® Soybean SG Herbicide by allowing maximum foliar uptake and contact activity. Weeds hardened off by environmental stress may not be adequately controlled or suppressed and regrowth may occur. PINNACLE® Soybean SG Herbicide may only be applied using ground equipment. For best results ensure thorough spray coverage of target weeds. Refer to "RATES AND TIMING" section of the label for complete use details.

PINNACLE® Soybean SG Herbicide rapidly stops growth of susceptible weeds. However, typical symptoms (discolouration) of dying weeds may not be noticeable for 1 to 3 weeks after application, depending on growing conditions and weed susceptibility. Favourable growing conditions following treatment promote the activity of PINNACLE® Soybean SG Herbicide while cold, dry conditions delay the activity.

Degree of control and duration of effect depend on weed sensitivity, weed size, crop competition, growing conditions and spray coverage.

PINNACLE® Soybean SG Herbicide may be applied on all soil types.

ENVIRONMENTAL HAZARDS:

- **TOXIC** to plants. Observe buffer zones specified under DIRECTIONS FOR USE.
- 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.

RAINFASTNESS INFORMATION:

Up to 25 mm of rain beginning 1 hour or more after spraying will not reduce the effectiveness of PINNACLE® **Soybean** SG Herbicide.

DIRECTIONS FOR USE,

Field sprayer application:

- DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty.
- DO NOT apply with spray droplets smaller than the ASAE medium classification.

Buffer zones:

Use of the following spray methods or equipment DO NOT require a buffer zone: hand-held or backpack sprayer, inter-row hooded sprayer and spot treatment.

The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, pastures, rangelands, 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	Buffer zone (metres) required for the protection of:		
	Terrestrial habitat	Aquatic habitats of water depths:	
		<1m	>1m
Field sprayer	15	1	0

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

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) medium classification.' To access the Buffer Zone Calculator, please visit the Pest Management Regulatory Agency web site.

PINNACLE® Soybean SG Herbicide USED ALONE

SPRAY ADJUVANTS:

PINNACLE® Soybean SG Herbicide must be applied with a recommended non-ionic surfactant, such as AG-SURF*, AGRAL* 90, or CITOWETT* PLUS at 1 litre per 1000 litres water (0.1% v/v) OR a crop oil concentrate (if applicable), such as SURE-MIX* at 0.5% v/v (0.5 litres per 100 litres of spray solution) or ASSIST* at 1-2 litres per hectare.

RATES AND TIMING:

PINNACLE® Soybean SG Herbicide may be applied anytime after the soybeans have the first trifoliolate leaf fully expanded and before soybeans have initiated flowering. PINNACLE® Soybean SG Herbicide can be applied up to 60 days before soybean harvest.

Use 8.25 or 12 grams PINNACLE® Soybean SG Herbicide per hectare. For best results apply to young actively growing weeds before the soybean canopy closes. Weeds should be less than 10 cm tall or across. Weeds that emerge after treatment will not be controlled.

NOTE:

If rain occurs after application, control may be reduced. Several hours of dry weather are needed to allow PINNACLE® Soybean SG Herbicide to be absorbed by weed foliage.

Apply 8.25 or 12 grams PINNACLE® Soybean SG Herbicide per hectare as a broadcast spray with a recommended surfactant.

WEEDS CONTROLLED AT 8.25 GRAMS PER HECTARE:

- Redroot pigweed
- Wild mustard
- Lady's thumb

WEEDS CONTROLLED AT 12.0 GRAMS PER HECTARE:

Weeds controlled at 8.25 grams per hectare plus:
Lamb's-quarters
Velvetleaf †

†The addition of a nitrogen-containing fertilizer such as 28% N, at 4 litres per 100 litres of spray solution, or an equivalent amount of nitrogen as urea (46-0-0) per ha may improve control of velvetleaf.

PINNACLE®Soybean SG Herbicide TANK MIXES

PINNACLE® Soybean SG Herbicide + ASSURE* II

For the control of annual grassy and specific broadleaf weeds, apply a tank mixture of the following:

PINNACLE® Soybean SG Herbicide	8.25 or 12.0 g/ha
plus	
ASSURE* II	0.5 L/ha
plus	
SURE-MIX*	0.5% v/v (0.5 litres per 100 litres of spray solution)

Consult the complete ASSURE* II Directions for Use pamphlet for grassy weeds controlled. For the correct use rate for the broadleaf weeds present, refer to the Weeds Controlled section in this label.

Consult the timing section of this label for the correct timing of application to grassy weeds. For optimum leaf stage timing of broadleaf weeds, consult the General Information section of this label. If leaf stages of the grass and broadleaf weeds do not coincide, a sequential application of the grass and broadleaf herbicides is required to ensure satisfactory control. Do not apply before the crop has 1-2 full trifoliolate leaves.

Velvetleaf control may be reduced with a single tank mix application. For optimum control, make separate applications of PINNACLE® **Soybean** SG Herbicide and ASSURE* II Herbicides.

DO NOT FREEZE.

Consult the ASSURE* II label for precautions, weeds controlled and additional restrictions on the use of ASSURE* II.

PINNACLE® Soybean SG Herbicide + ASSURE* II + BASAGRAN* FORTE

For the control of annual grassy and broadleaf weeds, apply a tank mixture of the following:

PINNACLE® Soybean SG Herbicide	8.25 or 12.0 g/ha
plus	
ASSURE* II	0.63 L/ha
plus	
BASAGRAN* FORTE	1.75 or 2.25 L/ha
plus	
SURE-MIX*	0.5% v/v (0.5 litres per 100 litres of spray solution)

Consult the BASAGRAN* FORTE label and the above table for the correct use rate for the broadleaf weeds present. Weeds controlled by 0.63 L/ha of ASSURE* II in this tank mix are listed on the ASSURE* II label at 0.5 L/ha (when ASSURE* II is used alone). The increase in the application rate of ASSURE* II in this tank mix is required for consistent grassy weed control.

Consult the ASSURE* II label for the correct timing of application to grassy weeds. For optimum leaf stage timing of broadleaf weeds, consult the BASAGRAN* FORTE label and as well as the General Information and Directions for Use sections in this label. If leaf stages of the grass and broadleaf weeds do not coincide, a sequential application of the grass and broadleaf herbicides is required to ensure satisfactory control. Do not apply before the crop has 1-2 full trifoliolate leaves.

DO NOT FREEZE.

Consult the ASSURE* II and BASAGRAN* FORTE labels for precautions, weeds controlled and additional restrictions.

PINNACLE® Soybean SG Herbicide plus BASAGRAN* or BASAGRAN* FORTE tank mix

PINNACLE® Soybean SG Herbicide may be tank-mixed with BASAGRAN* or BASAGRAN* FORTE to control additional weeds not controlled by PINNACLE® Soybean SG Herbicide alone. If BASAGRAN* FORTE is used, an additional adjuvant is not required. This tank mix includes:

PINNACLE® Soybean SG Herbicide	12.0 g/ha
plus	
BASAGRAN* FORTE	1.75 or 1.25 L/ha

PINNACLE® Soybean SG Herbicide	12.0 g/ha
plus	
BASAGRAN*	1.75 or 2.25 L/ha
plus	
ASSIST*	1.0 – 2.0 L/ha

The tank mixture will control the weeds listed for control by PINNACLE® Soybean SG Herbicide alone (at 12 g/ha), plus the weeds listed on the BASAGRAN* or BASAGRAN* FORTE label. Please refer to the BASAGRAN* or BASAGRAN* FORTE label for weeds controlled at the appropriate use rate, as well as additional application instructions and use precautions.

MIXING INSTRUCTIONS:

1. Always start with a clean and empty sprayer tank. Fill the tank to 1/3 full of **clean** water.
2. With the agitator running, add the required amount of Pinnacle® Soybean SG herbicide. Continue to agitate for a minimum of 5 minutes to ensure that Pinnacle® Soybean SG herbicide is **completely** dissolved.
3. Make sure there are no un-dissolved granules, and then add the required amount of the tank mix partner.
4. If the tank mix partner is an Emulsifiable Concentrate (EC), reduce agitation to avoid inducing an invert emulsion. Once dissolved, the Pinnacle® Soybean SG herbicide will remain in solution.
5. Add the rest of the water.
6. If required for the tank mixture, add the appropriate adjuvant. If an antifoam agent is required, add last.
7. The addition of a nitrogen containing fertilizer such as 28% N, at 4 litres per 100 litres of spray solution, or an equivalent amount of nitrogen as urea (46-0-0) per ha may improve control of velvetleaf and should be added after the surfactant.
8. For repeat tank loads, reduce the material remaining in the tank to 10% of the original volume **or less**

before proceeding with step 1, because remaining chemicals may prevent Pinnacle® Soybean SG herbicide granules from completely dissolving. If this is not possible, pre-slurry the Pinnacle® SG herbicide in a small amount (5-10 L) of water before adding to the tank.

Agitation is required for uniform mixing and application. Apply PINNACLE® Soybean SG Herbicide in a minimum of 100 litres of water per hectare. Use spray preparation of PINNACLE® Soybean SG Herbicide within 24 hours or product degradation may occur resulting in a loss of weed control. Use vigorous agitation to thoroughly disperse spray mixtures that have been allowed to stand in the tank.

Calibrate sprayer only with clean water away from well site. Make scheduled checks of spray equipment.

SPRAYER CLEANUP:

CLEANING PRECAUTIONS:

CAUTION: DO NOT use ammonia with chlorine bleach. Using ammonia with chlorine bleach will release a gas with a musty chlorine odour, which may cause eye, nose, throat and lung irritation. DO NOT clean equipment in an enclosed area.

Extreme care should be taken to avoid damage by drift onto plants outside the target area or onto ponds, waterways or ditches or land intended for cropping. When spraying near adjacent sensitive crop or plants, do everything possible to reduce spray drift.

CLEANING INSTRUCTIONS:

To avoid subsequent injury to crops other than soybeans, immediately after spraying and prior to spraying other crops, thoroughly remove all traces of PINNACLE® Soybean SG Herbicide from mixing and spray equipment as follows:

1. Drain tank; then flush tank, boom and hoses with clean water for a minimum of ten minutes. Visually inspect tank to assure removal of all visible residues of PINNACLE® Soybean SG Herbicide. If necessary, repeat step 1. **DO NOT CLEAN SPRAYER NEAR WELL OR WATER SOURCE OR NEAR TO DESIRABLE VEGETATION.**
2. Fill tank with clean water while adding 1 litre household ammonia (containing a minimum 3% ammonia) per 100 litres of water. Flush solution through boom and hoses, and then add more water to completely fill tank. Allow to sit for 15 minutes with agitation. Again flush the hoses, boom and nozzles with the cleaning solution and drain tank.
3. Remove the nozzles and screens and clean separately in a bucket containing cleaning agent and water.
4. Repeat Step 2.
5. Thoroughly rinse the tank with clean water for a minimum of 5 minutes, flushing water through the hoses and boom.

USE PRECAUTIONS:

- Do not apply to soybeans that are stressed by severe weather conditions, frost, low fertility, drought, water saturated soil, disease or insect damage as crop injury may result.
- Do not make more than one application per growing season.
- Do not apply to irrigated land where tail water will be used to irrigate crop land. Do not contaminate irrigation water.

- Under certain conditions (such as heavy rainfall, prolonged cool weather, frost conditions, wide fluctuations in day/night temperatures), temporary lightening in crop colour and occasionally a slight reduction in crop height may occur.
- Because crop varieties differ in their tolerance to herbicides, limit first use of PINNACLE® Soybean SG Herbicide to a small area of each variety prior to adoption as a field practice.
- Do not mix, load, or apply within 15 meters of all wells, bodies of water and wetland areas.
- Do not re-enter treated fields until 12 hours after application.
- Apply only when the potential for drift to areas of human habitation or areas of human activity (houses, cottages, schools and recreational areas) is minimal. Take into consideration wind speed, wind direction, temperature inversion, application equipment and sprayer settings.
- Do not plant any crop other than soybeans, tomatoes, wheat or barley, or Imazamox or Imazethapyr tolerant canola (e.g. Clearfield* canola varieties) for 30 days after application of Pinnacle SG Herbicide.

CAUTION:

Do not graze the treated crops or cut for hay; sufficient data are not available to support such use.

RESISTANCE-MANAGEMENT RECOMMENDATIONS:

For resistance management, PINNACLE® Soybean SG Herbicide is a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to PINNACLE® Soybean SG Herbicide and other Group 2 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 PINNACLE® Soybean SG Herbicide or other Group 2 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.

2020-06-12
Sub.No.2020-1059

- ◆ Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- ◆ For further information or to report suspected resistance, contact your local FMC representative or the FMC hotline at 1-833-362-7722 for further information.

STORAGE:

Store product in original container in a secure, dry area away from pesticides, fertilizers, food or feed. Not for use or storage in or around the home. Keep container tightly closed and dry.

DISPOSAL:

1. Triple or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
3. Make the empty container unsuitable for further use.
4. Dispose of the empty container in accordance with provincial requirements.
5. For information on the disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of spill, and for clean-up of spills.

NOTICE TO USER:

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

Pinnacle is a Registered trademarks/trademarks of FMC Corporation or an affiliate.

* All other products mentioned are trademarks of their respective companies.