OPTIONTM 2.25 OD LIQUID HERBICIDE



GROUP 2 HERBICIDE

FOR SALE FOR USE IN EASTERN CANADA AND MANITOBA ONLY

COMMERCIAL



WARNING - SKIN IRRITANT CAUTION - EYE IRRITANT POTENTIAL SKIN SENSITIZER

REGISTRATION NUMBER: 27424PEST CONTROL PRODUCTS ACT

GUARANTEE:

Foramsulfuron 22.5 g/L

READ THE LABEL AND THIS BOOKLET BEFORE USING

Product Information: 1-888-283-6847

Bayer CropScience Inc.

Suite 200, 160 Quarry Park Blvd S.E. Calgary, Alberta T2C 3G3

NET CONTENTS:

1 L to Bulk

IN CASE OF SPILLS, POISONING OR FIRE, TELEPHONE EMERGENCY RESPONSE NUMBER 1-800-334-7577 (24 HOURS A DAY)

OPTION 2.25 OD Liquid Herbicide

Table of Contents:		Section Number:
GENERAL INFORMATION	The Product	1
SAFETY AND HANDLING	Precautions, Protective Clothing	
	and Equipment, and	
	Re-entry Restrictions	2
	First Aid and	
	Toxicological Information	3
	Environmental Precautions and	
	Information	4
	Storage	5
	Disposal	6
DIRECTIONS FOR USE	Crops, Weeds, Rates, Timings, and	
	Additives	7
	Tank Mixes for Use in Field Corn	8
	Minor Uses	9
	Herbicide Resistance Management	10
	Application Instructions, Cautions	
	and Recropping Guidelines	11
	Mixing Instructions	12
	Sprayer Cleanup	13
	Livestock Feeding and Preharvest	
	Intervals	14
	Notices	15

For More Information, Contact:

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GENERAL INFORMATION

Section 1: THE PRODUCT

OPTION 2.25 OD Liquid Herbicide is a post-emergent herbicide which controls a broad spectrum of grassy and broadleaf weeds in Field Corn in Eastern Canada and Manitoba utilizing conventional tillage systems and in lowbush blueberries in Eastern Canada.

SAFETY AND HANDLING

Section 2: PRECAUTIONS, PROTECTIVE CLOTHING AND EQUIPMENT, AND RE-ENTRY RESTRICTIONS

PRECAUTIONS:

WARNING: SKIN IRRITANT CAUTION: EYE IRRITANT POTENTIAL SKIN SENSITIZER

KEEP OUT OF REACH OF CHILDREN.

Avoid contact with eyes, skin or clothing.

Avoid breathing spray mist.

Wash thoroughly after using and before eating, drinking, smoking or using the toilet.

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

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's web site at: www.croplife.ca.

Protective Clothing and Equipment:

Wear long sleeved shirt, long pants, socks and footwear during mixing, loading, application, clean-up and repair. In addition, wear chemical-resistant gloves during mixing, loading, clean-up and repair.

Re-entry Restriction:

Do not enter or allow worker entry into treated areas until residues have dried.

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. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give **any** liquid to the person. Do not give anything by mouth to an unconscious person. **IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

TOXICOLOGICAL INFORMATION:

This product contains petroleum distillates. Vomiting may cause aspiration pneumonia. Medical personnel should contact Bayer's medical information services toll-free 1-800-334-7577.

Section 4: ENVIRONMENTAL PRECAUTIONS AND INFORMATION

TOXIC to aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under Directions for Use (see Section 8: Tank Mixes and Section 10: Application Instructions, Cautions and Recropping Guidelines).

This product may be harmful to beneficial predatory or parasitic arthropods. The best available application technique, which minimises off-target drift, should be used to reduce effects on beneficial arthropods in the field boundary.

Do not apply in areas where there is a potential for run-off. If rainfall is imminent, delay spraying. Do not apply, drain, or flush spray 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.

This product contains a petroleum distillate which is moderately to highly toxic to aquatic organisms. Avoid contamination of aquatic systems during applications. DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

USE ONLY FOR RECOMMENDED PURPOSES AND AT RECOMMENDED RATES.

Section 5: STORAGE

Keep in original container during storage.

Store the tightly closed container away from feeds, seeds, fertilizers, plants and foodstuffs. If stored for one year or longer, shake well before using.

Do not use or store in or around the home.

Section 6: DISPOSAL

Recyclable Container Disposal:

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

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

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

Returnable Container Disposal:

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

Refillable Container Disposal:

For disposal, this empty container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

Disposal of Unused, Unwanted Product:

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for cleanup of spills.

Disposal of Unused Spray Solution:

If any spray solution remains in the tank after spraying is finished, it should be thoroughly diluted, then sprayed on the perimeter of the area just sprayed, away from water supplies, ditches, and irrigation canals.

DIRECTIONS FOR USE

Section 7: CROPS, WEEDS, RATES, TIMING, ADDITIVES

SPRAY ADDITIVES: OPTION 2.25 OD Liquid Herbicide is to be used in conjunction with liquid nitrogen fertilizer (28 % UAN) at a rate of 2.5 L/ha. Use of a spray-grade liquid nitrogen fertilizer is recommended.

CORN STAGING: Apply OPTION 2.25 OD Liquid Herbicide from the 1-8 leaf stage of the Corn plant, or 5-6 visible collars (the leaf is counted once the next leaf is visible in the whorl). The tank mix partner label must be consulted for additional leaf staging restrictions.

APPLICATION RATES AND WEED STAGING: For use in field corn, OPTION 2.25 OD Liquid Herbicide is to be applied at 1.56 L product/ha and always in tank mixture with one of the herbicides listed in Section 8. Best control of the following weeds will be obtained when OPTION 2.25 OD Liquid Herbicide is applied in tank mixture at the recommended leaf stage of the weeds.

APPLICATION TIMING

Quackgrass	3-6 leaves (up to early tillering)
ANNUAL GRASSES	
Barnyard Grass	1-6 leaves (up to early tillering)
Crabgrass, Large	1-6 leaves (up to early tillering)
Fall Panicum	1-4 leaves (up to early tillering)
Foxtail, Bristly	3-5 leaves (up to early tillering)
Foxtail, Green	2-5 leaves (up to early tillering)
Foxtail, Yellow	2-5 leaves (up to early tillering)
Long-spined Sandbur	3-5 leaves
Proso Millet	2-5 leaves (up to early tillering)
Wirestem Muhly	3-6 leaves (up to early tillering)
Witchgrass	2-4 leaves

BROAFLEAF WEEDS

WEED

Chickweed, Common	4-6 leaf
Pigweed, Redroot	1-7 leaf
Velvetleaf	1-4 leaf
Mustard (Wild)	5-7 leaf
Mustard (Wormseed)	5-9 leaf
Nightshade, Eastern Black	1-5 leaf
Lamb's-quarters	4-8 leaf
Ragweed, Common (suppression)	2-4 leaf

Section 8: TANK MIXES FOR USE IN FIELD CORN

Consult the label of the tank mix partner for further instructions regarding directions for use, restrictions and precautions. Certain tank mix partners may have additional restrictions for crop leaf staging. Consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture.

For control of weeds present and control of later flushes of annual broadleaf weeds and/or annual grasses (see Tank Mix Directions), OPTION 2.25 OD Liquid Herbicide must be tank mixed at a rate of 1.56 L/ha with one of the following herbicides:

TANK MIX PRODUCT	RATE	DIRECTIONS
Aatrex TM Nine-0*	930 g – 1.24 kg/ha	Adjust Aatrex Nine-O rate to the level of residual activity desired. Apply up to the 8 leaf stage of Corn.
Aatrex TM 480*	1.75 – 2.33 L/ha	Adjust Atrazine rate to the level of residual activity desired. Apply up to the 8 leaf stage of Corn.
Banvel II TM ,	300 mL/ha	This tank mix will provide enhanced control of annual broadleaf weeds. Apply up to the 8 leaf stage of Corn.
Marksman TM	2.5 L/ha	This tank mix will provide residual control of annual grasses and annual broadleaf weeds. Apply up to the 5 leaf stage of Corn.
Peak + Banvel II TM	13.3 g/ha + 300 mL/ha	This tank mix will provide enhanced control of annual broadleaf weeds. Apply up to the 7 leaf stage of Corn.
Distinct Herbicide (Agricultural) <i>or</i> Distinct Herbicide Water Dispersible Granule	285 g/ha	This tank mixture will provide enhanced weed control, including control of common ragweed, wild buckwheat and lady's-thumb. Apply up to the 6 leaf stage of Corn. Do not apply to seed or sweet corn.
Pardner + Aatrex TM Nine-0 <i>or</i> Aatrex TM 480	0.5 L/ha + 0.55 kg/ha or 1.04 L/ha	This tank mixture will provide enhanced weed control, including control of common ragweed, wild buckwheat and lady's-thumb. Apply up to the 8 leaf stage of Corn.
Callisto 480 SC	0.21 L/ha +	This tank mixture will provide enhanced weed control, including control of common ragweed, wild buckwheat and lady's-thumb. Apply up to the 8 leaf stage of Corn.
Aatrex TM Nine-0 or Aatrex TM 480	0.31 kg/ha or 0.58 L/ha	
or Aduca 400	01 0.36 L/IIa	

^{*} for atrazine with different concentration, adjust the rate accordingly.

TANK MIXTURE FOR USE IN MANITOBA CANADA ONLY

TANK MIX RATE DIRECTIONS PRODUCT

Banvel IITM, 300 mL/ha This tank mix will provide enhanced control of annual

broadleaf weeds. Apply up to the 8 leaf stage of Corn.

Note:

DO NOT tank mix OPTION 2.25 OD Liquid Herbicide with pesticides, fertilizers or any other chemical additives unless recommended on this label.

Section 9: MINOR USES

NOTE TO USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS (BELOW): The DIRECTIONS FOR USE for this product for the uses described below were developed by persons other than Bayer CropScience and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Bayer CropScience itself makes no representation or warranty with respect to performance (efficacy) or crop tolerance (phytotoxicity) claims for this product when used on the crops listed below. Accordingly, the Buyer and the User assume all risks related to performance and crop tolerance arising, and agree to hold Bayer CropScience harmless from any claims based on efficacy or phytotoxicity in connection with the uses described below.

CROP	WEEDS	APPLICATION	COMMENTS
	CONTROLLED	RATE	
Lowbush Blueberries (Eastern Canada only)	Weeds listed under Section 7, plus the following fescue grasses: Suppression of: • Fine-Leaf Sheep Fescue • Sheep Fescue • Red Fescue • Tall Fescue	Apply OPTION 2.25 OD LIQUID Herbicide at 1.56 L/ha in conjunction with liquid nitrogen fertilizer (28 % UAN) at a rate of 2.5 L/ha.	 Apply OPTION 2.25 OD LIQUID Herbicide to lowbush blueberries in the spring of the sprout year when weed species listed under Section 7 are at the specified growth stages and fescue grass is at the 1-6 leaf stage. Apply using a minimum of 150 litres of water per hectare. Do not apply OPTION 2.25 OD LIQUID Herbicide to any field more often than once per year. Ground application only. DO NOT apply by air. Refer to Sections 7 and 10 for additional use information and cautions.

Section 10: HERBICIDE RESISTANCE MANAGEMENT

For resistance management, OPTION 2.25 OD Liquid Herbicide is a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to OPTION 2.25 OD Liquid 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:

- 1. Where possible, rotate the use of OPTION 2.25 OD Liquid Herbicide or other Group 2 herbicides with different herbicide groups that control the same weeds in a field.
- 2. Use tank mixtures with herbicides from a different group when such use is permitted.
- 3. Herbicide use should be based on an IPM program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical), cultural, biological and other chemical control practices.
- 4. Monitor treated weed populations for resistance development.
- 5. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment and planting clean seed.
- 6. 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.
- 7. For further information or to report suspected resistance, contact your local Bayer representative, or call Bayer CropScience Inc. toll-free at 1-888-283-6847.

Section 11: APPLICATION INSTRUCTIONS, CAUTIONS AND RECROPPING GUIDELINES

Application Instructions:

Apply only once per season.

For best results, apply to emerged, young, actively growing weeds.

OPTION 2.25 OD Liquid Herbicide will have an effect on weeds that are larger than the recommended leaf stage, however the speed of activity and level of control may be reduced.

Apply OPTION 2.25 OD Liquid Herbicide in a minimum of 150 L/ha of water and at a pressure of 175 - 275 kPa.

The use of 80° or 110° flat fan nozzles is highly recommended for optimum spray coverage and canopy penetration. Use 50 mesh filter screens or larger.

Follow directions elsewhere on the label for the correct rate and timing of application.

The speed of action of OPTION 2.25 OD Liquid Herbicide is influenced by environmental factors. Weed growth ceases within 1-3 days after OPTION 2.25 OD Liquid Herbicide is

applied. Warm, moist conditions promote the activity of OPTION 2.25 OD Liquid Herbicide. Typically, yellowing symptoms usually appear in 5-10 days.

Under cool and/or dry conditions activity may be reduced or delayed. Weed control may also be reduced if application is made when weeds are dust covered or in the presence of heavy dew, fog, or mist/rain.

OPTION 2.25 OD Liquid Herbicide works primarily as a contact herbicide with limited soil residual activity. Uniform spray coverage is important to achieve consistent weed control. Control may be reduced if the corn canopy has closed in over the weeds, intercepting the spray.

<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 American Society of Agricultural Engineers (ASAE) medium classification. Boom height must be 60 cm or less above the crop or ground.

DO NOT apply by air.

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, spot treatment, soil drench, and soil incorporation.

The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, rangelands, riparian areas and shrublands), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands).

Method of	Crop	Buffer Zones (m	Protection of:	
application		Freshwater Habitat of Depths:		Terrestrial
		Less than 1 m	Greater than 1 m	habitat
Field sprayer*	Corn, Lowbush blueberries	1	1	3

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

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

Application Cautions: GROUND APPLICATION ONLY. DO NOT APPLY BY AIR

If crop is under stress due to abnormal environmental conditions, delay application until stress passes and after both crop and weeds have resumed active growth.

Use spray nozzles which provide for good spray coverage. Do not use flood jet nozzles.

Avoid contact with desirable plants or crops either from direct application or from spray drift as severe damage may occur.

For maximum crop safety, do not apply OPTION 2.25 OD Liquid Herbicide to Corn which has been treated with an organophosphorous insecticide, such as Counter®. If an IR field corn hybrid is planted, organophosphorous insecticides can be used according to label directions without increasing the likelihood of injury to those hybrids when OPTION 2.25 OD Liquid Herbicide is applied.

Recropping Guidelines:

Only the following crops have been field tested to indicate they may be safely planted at the prescribed interval after an application of OPTION 2.25 OD Liquid Herbicide. To avoid the possibility of injury to subsequent crops after an application of the recommended rate of OPTION 2.25 OD Liquid Herbicide, follow the crops and replanting interval which appear on this label and the label of the tank mix partner, and always observe the most restrictive replanting interval.

CROP	REPLANTING INTERVAL
Wheat, Winter	4 months
Alfalfa	10 months
Barley, Spring	10 months
Beans, Dry Common (all types)	10 months
Cabbage, Head	10 months
Canola, Spring	10 months
Clover, Red	10 months
Corn, Field and Sweet	10 months
Oats, Spring	10 months
Peas, Processing and Field	10 months
Potatoes	10 months
Soybeans	10 months
Sugarbeets	10 months
Timothy	10 months
Tomatoes, Field and Fresh Market	10 months
Wheat, Spring	10 months
wheat, Spring	10 IIIOIIUIS

Section 12: MIXING INSTRUCTIONS

OPTION 2.25 OD Liquid Herbicide must be applied with properly calibrated and clean sprayer

equipment.

OPTION 2.25 OD Liquid Herbicide is specially formulated to mix readily in water. Prior to adding OPTION 2.25 OD Liquid Herbicide to the spray tank, ensure that the spray tank is thoroughly clean (see Section 12 "SPRAYER CLEANUP").

- 1. Fill tank to half full with clean water and begin agitation.
- 2. Add the correct amount of OPTION 2.25 OD Liquid Herbicide and continue agitation until thoroughly dispersed. OPTION 2.25 OD Liquid Herbicide should be thoroughly mixed with water before adding any other material.
- 3. Add the correct amount of the dry component(s) of tank-mix partner(s) while continuing agitation and ensure it is fully dispersed before moving to next step.
- 4. Add the correct amount of the liquid component(s) of tank-mix partner while continuing agitation.
- 5. As the tank is filling and agitation is continuing, add the required spray adjuvant, liquid nitrogen fertilizer (28% UAN).
- 6. Add the remaining amount of water while continuing agitation and spray out within 24 hours of mixing to avoid product degradation.
- 7. If OPTION 2.25 OD Liquid Herbicide is to be added to a partial tank of Corn herbicides, pre-slurry OPTION 2.25 OD Liquid Herbicide in clean water prior to adding to the tank. This will prevent tank mix partners from interfering with the dissolution of OPTION 2.25 OD Liquid Herbicide.

Note: Ensure that all circuits (pipes, booms, etc.) have the correct OPTION 2.25 OD Liquid Herbicide/water concentration before application is started. Use vigorous agitation to thoroughly disperse spray mixtures that have been allowed to stand in the tank.

Section 13: SPRAYER CLEANUP

Before and after using OPTION 2.25 OD Liquid Herbicide always complete a thorough cleaning of the spray tank, lines and filters. The following procedures are recommended:

- 1. Drain and flush tank, boom and all hoses for several minutes with clean water containing a household detergent. Do not clean or empty the sprayer near desirable vegetation, wells or other water sources.
- 2. Fill the sprayer tank with clean water and add one litre of household ammonia (containing 3% ammonia) per 100 litres of water. Allow the solution to agitate for 15 minutes prior to flushing the solution through the boom and nozzles. Drain the system completely.
- 3. Remove the nozzles and screens and wash separately in a bucket containing the ammonia solution.
- 4. Thoroughly rinse the tank, hoses, booms, nozzles and screens with clean water for a minimum of 5 minutes to remove all traces of ammonia.
- 5. Inspect tank for visible residues. If present, repeat step 2.
- 6. Dispose of rinsings in accordance with provincial regulations.

Section 14: LIVESTOCK FEEDING AND PREHARVEST INTERVALS

DO NOT graze the treated Cornfields or cut Corn for forage within 45 days of application.

DO NOT harvest grain within 70 days of application. Refer to tank mix partner label for additional livestock feeding and preharvest interval information.

Section 15: 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. The user assumes the risk to persons or property that arises from any such use of this product.

FOR MORE INFORMATION CONTACT:

Product Information: 1-888-283-6847

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