GROUP	4	9	HERBICIDES

RUSTLER®

Liquid Herbicide

Water soluble herbicide for non-selective weed control for pre-seeding application in cereals and in summerfallow.

AGRICULTURAL

DANGER CORROSIVE TO EYES

CAUTION  **POISON**

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

Complete Directions for Use

REGISTRATION NO. 27200 PEST CONTROL PRODUCTS ACT

AVOID CONTACT WITH FOLIAGE OF CROP OF OTHER DESIRABLE VEGETATION SINCE SEVERE INJURY OR DESTRUCTION MAY RESULT

NOT FOR REFORMULATION OR REPACKAGING

GUARANTEE:
Glyphosate, present as the isopropylamine salt….194 g a.e./L
Dicamba, present as the isopropylamine salt……....46 g a.e./L

MONSANTO CANADA INC.
900-One Research Road
Winnipeg, MB R3T 6E3
1-800-667-4944

TO USER
Read NOTICE TO USER before buying or using. If notice terms are not acceptable, return at once unopened.

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN
MAY CAUSE IRREVERSIBLE DAMAGE TO EYES
HARMFUL IF SWALLOWED
MAY CAUSE ALLERGIC SKIN REACTION
HARMFUL IF INHALED

Avoid inhaling dust, sprays, etc.
Do not get in eyes, on skin or on clothing.
Wear a long-sleeved shirt, long pants, goggles or a face shield and chemical-resistant gloves during mixing, loading, clean-up or repair activities.
Applicators must wear a long-sleeved shirt, long pants and chemical-resistant gloves.
DO NOT enter treated fields until 12 hours after application.
Wash thoroughly with soap and water after handling.
DO NOT permit lactating dairy animals to graze fields within 7 days after application.
DO NOT harvest forage or cut hay within 30 days after application. Withdraw meat animals from treated fields at least 3 days before slaughter.

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 website at www.croplife.ca.

FIRST AID

If swallowed: Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water or milk 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 on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.
If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.
If in eyes: Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.
Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION:

Dicamba may cause severe irritation to the eyes, and irritation to the skin and mucous membranes. Symptoms of overexposure 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. Treat symptomatically.

In case of an emergency involving this product, call Monsanto collect, day or night:
Accident/Spills/Medical Emergency ……(314) 694-4000
or …….. 1-800-332-3111
or CANUTEC ……. (613) 996-6666

For additional information on this or other Monsanto agricultural products, call the Monsanto Canada CustomCare Line at: 1-800-667-4944

PHYSICAL OR CHEMICAL HAZARDS

Spray solutions of this product should be mixed, stored and applied only in stainless steel, aluminum, fiberglass, plastic and plastic-lined steel containers.

DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

ENVIRONMENTAL HAZARDS

Avoid direct applications to any body of water. Do not use in areas where adverse impact on domestic water or aquatic species is likely. Do not contaminate water by disposal of waste or cleaning of equipment. Avoid all drift to or contact with other vegetation for which treatment is not intended as damage or destruction may occur.

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).

Potential for contamination of aquatic areas as a result of runoff may be reduced by including an untreated vegetative strip between the treated area and the edge of the water body.
Avoid applying this product when heavy rain is forecast

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 the depth to the water table is shallow.

STORAGE
Store product in original container only, away from other pesticides, fertilizer, food or feed. Not for use or storage in or around the home. Store above 5^{o}C to keep product in solution. If crystals form, place in a warm room (20^{o}C), allow the product to reach room temperature and roll or shake periodically until crystals have redissolved. Keep container closed to prevent spills and contamination.

DISPOSAL

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

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

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

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

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

For information on the disposal of unused, unwanted product, contact the Provincial Regulatory Agency or the manufacturer. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

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

GENERAL INFORMATION

Rustler Liquid Herbicide is a postemergent herbicide for control or suppression of emerged weeds prior to seeding cereals in reduced tillage operations and in fallow land.

This product enters the plant through the foliage and moves throughout the plant. Visual effects of control are gradual wilting or yellowing of the plant, which advances to complete browning of above-ground growth and deterioration of affected underground plant parts. Visible symptoms will usually develop on labeled weeds within 5 to 7 days after applications, but may not occur for more than 7 days. Extremely cool or cloudy weather following treatment or prolonged drought conditions may slow activity of this product and delay the visual effects of control. Always use the higher rate of this product per hectare when weeds are under poor growing conditions, such as drought.

Reduced control may result if treatments are made during poor growing conditions such as drought stress, disease or insect damage, or if weeds have been mowed, grazed or cut. Heavy dust on foliage or an overstory canopy covering targeted weeds may also reduce control.

This product does not provide residual weed control. For subsequent residual weed control, follow a label-approved herbicide program. Read and carefully observe the precautionary statements and all other information appearing on the labels of all herbicides used.

Rainfall occurring with 6 hours after application, particularly on weeds growing under stress conditions, may reduce the effectiveness of this product. Heavy rainfall within 2 hours after application may wash the chemical off the foliage and a repeat treatment may be required. For best results spray coverage should be uniform and complete.

RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, Rustler Liquid Herbicide is a Group 4 and 9 herbicide. Any weed population may contain or develop plants naturally resistant to Rustler Liquid Herbicide and other Group 4 or 9 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 Rustler Liquid Herbicide or other Group 4 or 9 herbicides 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.
- 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.
- Monitor treated weed populations for resistance development.
- Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment and planting clean seed.
- 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 Monsanto Canada at 1-800-667-4944 or at www.Monsanto.ca.

APPLICATION PRECAUTIONS

DO NOT APPLY THIS PRODUCT USING AERIAL SPRAY EQUIPMENT.

AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURING DESIRABLE PLANTS AND CROPS. Do not allow spray mist to drift since even minute quantities of spray can cause severe damage or destruction to nearby crops, plants or other areas on which treatment is not intended, or may cause other unintended consequences. Do not apply during wind conditions, as spray drift may occur. When spraying, avoid combinations of pressure and nozzle type that will result in fine particles (mist) which are more likely to drift.

NOTE: Use of this product in any manner not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences. Keep container closed to prevent spills and contamination.

MIXING INSTRUCTIONS

Fill the spray tank to about ¾ of the desired volume with clean water. Add the recommended amount of Rustler Liquid Herbicide, then complete the filling process while maintaining agitation. Remove the hose from the mix tank immediately after filling to avoid siphoning back into the carrier source. During mixing and application, foaming of the spray solution may occur. To prevent or minimize foam, terminate by-pass and return lines at the tank bottom during mixing.

NOTE: Reduced results may occur if water containing soil is used, such as water from ponds and unlined ditches.

DIRECTIONS FOR USE

Recommended applications of this product can be made as required prior to seeding in cereal crops and to fallow land.
This product or labeled tank mixtures should be applied to emerged, actively growing weeds. Application at earlier growth stages generally will provide best results.

Reduced results may occur if application of this product or labeled tank mixtures are made to weeds which are not actively growing or weeds that are drought stressed.

For additional information and precautions refer to the "GENERAL INFORMATION", "MIXING INSTRUCTIONS" and "APPLICATION PRECAUTIONS" sections of this label.

Apply this product at 2.5 to 3.125 L/ha in 50 to 100 litres of clean water per hectare. The higher rate of this product should be applied when weeds are under poor growing conditions such as drought or for those weeds specified in the table below.

When applied as recommended, this product will control weeds as outlined in the following "WEEDS CONTROLLED" table.

DO NOT apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands), estuarine or marine habitats.

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

Field sprayer application: DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) medium/coarse classification (according to the appropriate buffer zone table).

Boom height must be 60 cm or less above the crop or ground.

BUFFER ZONES

The buffer zones specified in the tables 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.

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

Table 1 Buffer Zones for Uses in Agriculture Sites using ASAE Medium Applications

Method of Application	Crop	Buffer Zones (metres) Required for the Protection of:				
		Freshwater habitat of depths:		Estuarine/marine habitats of depths:		Terrestrial habitat
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field sprayer*	Fallow land	1	1	0	0	15

*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%.

Table 2 Buffer Zones for Uses in Agriculture using ASAE Coarse Applications

Method of Application	Crop	Buffer Zones (metres) Required for the Protection of:				
		Freshwater habitat of depths:		Estuarine/marine habitats of depths:		Terrestrial habitat
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field sprayer*	Fallow land	1	1	0	0	5

*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%.

WEEDS CONTROLLED WITH RUSTLER LIQUID HERBICIDE

WEEDS CONTROLLED	(L/ha)	APPLICATION TIMING
ANNUAL GRASSES		
Brome (Downy)*	2.5	Any time between emergence and heading
Cereals (Volunteer)	2.5	Any time between emergence and heading
Darnel (Persian)	2.5	Any time between emergence and heading
Foxtail (Green)	2.5	Any time between emergence and heading
Oats (Wild)	2.5	Any time between emergence and heading
ANNUAL BROADLEAVES		
Buckwheat, wild	2.5	1 to 4 leaf stage
Canola (volunteer)	2.5	Up to 15 cm height
(does not control volunteer Roundup Ready canola)		
Cowcockle	2.5	Up to 15 cm height
Flixweed*	2.5	Up to 15 cm height
Kochia	2.5	Up to 15 cm height
Ladysthumb	2.5	Up to 15 cm height
Lambsquarters	2.5	Up to 15 cm height

Mustard, wild	2.5	Up to 15 cm height
Pigweed (Redroot)	2.5	Up to 15 cm height
Smartweed	2.5	Up to 15 cm height
Stinkweed	2.5	Up to 15 cm height
Thistle, Russian	2.5	Up to 15 cm height

PERENNIAL

Barley (Foxtail)**	3.125	Before initiation of seed head or browning of lower leaves

* See "SPECIAL WEED CONTROL CONCERNS" section of label
** Suppression only

SPECIAL WEED CONTROL CONCERNS

Annual Weed Control Prior to Seeding
Rustler Liquid Herbicide may be applied to emerged annual weeds (see Weeds Controlled with Rustler Liquid Herbicide table) in reduced tillage systems prior to seeding for cereal crops such as wheat, barley, rye, oats and field corn only (do not apply prior to sweet corn). Planting should follow soon after application since this product does not provide residual weed control. Applications too far in advance of seeding will allow weeds to emerge between application and crop emergence.

NOTE:
Certain broadleaved crops such as lentils, peas, canola and flax can be injured by a pre-seeding application with this product and so should not be planted to a field receiving this type of treatment.

Use only the 2.5 L/ha rate for pre-seeding applications. Do not apply after crop emergence.

For field corn, apply to medium to fine textured soils containing more than 2.5% organic matter. Do not use on sandy or sandy loam soils.

Winter Annual Weeds
For best control of winter annual broadleaf weeds, such as flixweed and stinkweed, 2,4-D should be applied to emerged, actively growing weeds in the fall previous to the fallow season or in early spring in the fallow season when winter annual weeds are less than 10 cm tall. Refer to the 2,4-D product label for appropriate rates and other use instructions and cautionary statements.

Downy Brome
For best control of this winter annual weed, Rustler Liquid Herbicide can be applied after emergence in the fall previous to the fallow season or in spring of the fallow season up to seed head emergence.

Control of Weeds Under Stress Conditions
Under certain stress conditions, such as drought, cool temperatures or where extremely hard water (> 700 ppm Ca + Mg) has been used, weed control may be reduced with this product. However, the following list of application instructions will help improve results under these conditions.
-- Use 50 L/ha water volume

AND

- Use the higher rate of Rustler Liquid Herbicide within the recommended rate range (3.125 L/ha)

RUSTLER LIQUID HERBICIDE PLUS 2,4-D TANK MIX FOR THE CONTROL OF VOLUNTEER ROUNDUP READY CANOLA AND OTHER BROADLEAF WEEDS

For control of volunteer Roundup Ready canola and wider spectrum broadleaf weed control in summerfallow or prior to seeding/after seeding prior to crop emergence in **wheat, winter wheat, barley and rye**, Rustler Liquid Herbicide may be tank mixed with 2,4-D low volatile ester or amine formulations.

Refer to the 2,4-D herbicide label for further safety precautions and handling instructions.

WEEDS CONTROLLED WITH RUSTLER LIQUID HERBICIDE TANK MIXTURE WITH 2,4-D FOR SUMMERFALLOW & MINIMUM TILLAGE SYSTEMS

TANK MIX	RATE (L/ha)	WEEDS CONTROLLED	COMMENTS (Apply in 50-100 L/ha water)
Rustler Liquid Herbicide + 2,4-D#	2.5 – 3.125 + 0.6 – 0.9 or 1.2 – 1.5	Downy brome, volunteer cereals, Persian darnel, green foxtail, wild oats, foxtail barley* Wild buckwheat**, volunteer canola, (non-Roundup Ready), cow cockle, flixweed, kochia, lady's-thumb, lamb's-quarters, wild mustard, redroot pigweed, smartweed, stinkweed, Russian thistle	Any time between emergence and heading *Use 3.125 l/ha before initiation of seed head or lower leaves browning. Suppression only. Up to 15 cm tall and actively growing for best results. ** 1-4 leaf stage use 2.5 l/ha
Use this tank mix in summerfallow, prior to seeding or after seeding but before crop emergence in **wheat, winter wheat, barley and rye**	Use only the 2.5 L/ha rate of Rustler Liquid Herbicide prior to seeding or after seeding cereals	Volunteer Roundup Ready canola (1-4 leaf stage), bluebur, burdock (before the 4 leaf), cocklebur, common plantain, daisy fleabane, false flax, false ragweed, goat's beard, mustards (except dog and tansy), prickly lettuce, ragweeds (common & giant), Russian pigweed, shepherd's purse, stinging nettle, sweet clover, thyme-leaved spurge, wild radish, wild sunflower	2,4-D at 0.6 – 0.9 L/ha (280 – 420 g ai/ha) 2-4 leaf stage unless noted

TANK MIX	RATE (L/ha)	WEEDS CONTROLLED	COMMENTS (Apply in 50-100 L/ha water)
		Weed listed above plus Volunteer Roundup Ready canola (4-6 leaf stage), annual sow thistle, blue lettuce, biennial wormwood, common chickweed, common purslane, curled dock (before 4 leaf), dog and tansy mustard, oak-leaved goosefoot, groundsel, gumweed, hairy galinsoga, hawkweed, heal-all, hedge bindweed, knotweed (before 4 leaf), leafy spurge, peppergrass, pineapple weed, prostrate pigweed, purslane, Russian knapweed, sheep sorrel, smartweed, tumble pigweed, velvetleaf, volunteer mustard, yellow rocket (before 4 leaf)	2,4-D at 1.2 – 1.5 L/ha (560 – 700 g ai/ha) 2-4 leaf stage unless noted
		Blue lettuce, biennial wormwood, gumweed, hedge bindweed, leafy spurge, Russian knapweed, yellow rocket (before 4 leaf), bull thistle, burdock buttercup, Canada thistle, field bindweed, field dandelion, hoary cress, mouse-eared chickweed, perennial sow thistle, tartary buckwheat, teasel, volunteer flax, volunteer sunflower	2,4-D at 1.2 – 1.5 L/ha (560 – 700 g ai/ha). Top growth control when applied after the 4 leaf stage

- Based on 470 g ai/litre 2,4-D. Adjust rates accordingly for other 2,4-D formulations. Use only low volatile ester or amine formulations of 2,4-D.

SPRAYER CLEANUP

CLEAN THE ENTIRE SPRAYER AFTER APPLICATION OF THIS PRODUCT. Failure to clean the sprayer thoroughly may result in injury to desirable crops which are subsequently sprayed. First, add clean water to the tank and thoroughly rinse the entire sprayer system. Secondly, fill the tank with water and ammonia. Add 1 litre of household ammonia per 100 litres of water. Pump enough solution through the hoses, boom and nozzles to fill these parts completely. Then fill the tank, close and leave for 24 hours before draining and rinsing thoroughly with water.

Application of use of other agricultural chemicals with the equipment used for this product may result in injury to desirable vegetation.

Manufactured by Monsanto Company
St. Louis, Missouri, 63167, U.S.