

[*Bag Label*]

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

ULTIM® 37.4 DF HERBICIDE

37.4% DRY FLOWABLE

REGISTRATION NO. 24682      PEST CONTROL PRODUCTS ACT

FOR SALE FOR USE IN EASTERN CANADA ON FIELD CORN

AGRICULTURAL

CAUTION - EYE IRRITANT  
POTENTIAL SKIN SENSITIZER

NET CONTENTS: 266.8 GRAMS  
(4 x 66.7 gram water soluble bags)

Do not sell water soluble bags separately.

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

GUARANTEE:      Rimsulfuron 18.7%  
                         Nicosulfuron 18.7%

Production Agriscience Canada Company  
P. O. Box 730  
7398 Queen's Line  
Chatham, Ontario  
N7M 5L1  
519-352-6350

**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.**  
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/drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.  
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.

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](http://www.croplife.ca).

**ENVIRONMENTAL HAZARDS:**

- TOXIC to non-target terrestrial plants and aquatic organisms. Observe buffer zones specified under DIRECTIONS FOR USE
- The use of this chemical may result in contamination of groundwater particularly in areas where soils are permeable (e.g. sandy soil) and/or the depth to the water table is shallow.
- 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.

**FIRST AID**

**INHALATION:** 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.

**EYE CONTACT:** 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.

**SKIN OR CLOTHING**

**CONTACT:** 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.

**INGESTION:** 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.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention. For medical emergencies call 1-800-441-3637 (24 hours).

TOXICOLOGICAL INFORMATION: Treat symptomatically.

#### STORAGE AND DISPOSAL

##### Storage

Store product in original container only, away from other pesticides, fertilizer, food or feed to prevent contamination. Not for use or storage in or around the home. Keep container closed. Keep water soluble bags in original outer bag away from moisture.

##### Disposal

1. Do not reuse this container for any purpose. After the container is empty, make it unsuitable for further use.
2. Dispose of the container in accordance with provincial requirements.

##### **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.

#### NOTICE TO USER

This pest control product is to be used only in accordance with the directions on this 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.

The seller warrants that the purchase by the buyer and the use of this product, as such, will not infringe on any Canadian patent.

[*Water Soluble Bag*]

ULTIM® 37.4 HERBICIDE

37.4% DRY FLOWABLE

KEEP OUT OF REACH OF CHILDREN

AGRICULTURAL

SEE DIRECTIONS FOR USE BROCHURE FOR  
COMPLETE PRECAUTIONARY STATEMENTS

GUARANTEE: Rimsulfuron 18.7%  
Nicosulfuron 18.7%

DRY FLOWABLE

NET CONTENTS: 66.7 GRAMS

CAUTION: EYE IRRITANT

POTENTIAL SKIN SENSITIZER

*[DFU Pamphlet]*

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

ULTIM® 37.4 HERBICIDE

37.4% DRY FLOWABLE

REGISTRATION NO. 24682      PEST CONTROL PRODUCTS ACT

FOR SALE FOR USE IN EASTERN CANADA ON FIELD CORN

AGRICULTURAL

READ THE LABEL AND THIS BOOKLET BEFORE USING

GUARANTEE:      Rimsulfuron 18.7%  
                         Nicosulfuron 18.7%

CAUTION - EYE IRRITANT  
POTENTIAL SKIN SENSITIZER

Do not sell water soluble bags separately.

Production Agriscience Canada Company  
P. O. Box 730  
7398 Queen's Line  
Chatham, Ontario  
N7M 5L1  
519-352-6350

**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.**

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/drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

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.

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](http://www.croplife.ca).

**FIRST AID**

**INHALATION:** 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.

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Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention. For medical emergencies call 1-800-441-3637 (24 hours).

**TOXICOLOGICAL INFORMATION:** Treat symptomatically.

**IMPORTANT**

Injury to or loss of desirable trees or vegetation may result from failure to observe the following: Do not

apply or 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. Keep from contact with fertilizers, insecticides, fungicides and seeds.

APPLY ULTIM® 37.4 DF HERBICIDE WITH A RECOMMENDED SURFACTANT.

DO NOT APPLY BY AIR.

Do not handle pesticides with bare hands. Chemical-resistant gloves significantly reduce hand exposure. Wear gloves for mixing/loading/clean-up operations and when making sprayer and nozzle repairs and adjustments. Do not use leather or cloth gloves.

Carefully observe sprayer cleanup instructions, as spray tank residue may damage crops other than corn.

#### GENERAL INFORMATION

ULTIM® 37.4 DF Herbicide is a dry flowable granular formulation to be mixed in water and applied post-emergence to field corn in Eastern Canada for control of quackgrass, annual grasses, and redroot pigweed. ULTIM® 37.4 DF Herbicide is non-corrosive, non-flammable, non-volatile, and does not freeze. ULTIM® 37.4 DF Herbicide is prepackaged in water soluble bags; each water soluble bag treats one hectare. Use gloves when handling the water soluble bags. Reseal unused water soluble bags into outer bag when not in use. Keep water soluble bags away from excess moisture or physical damage during storage and prior to mixing in the spray tank. Do not reuse outer bag.

#### DIRECTIONS FOR USE

##### ENVIRONMENTAL CONDITIONS AND BIOLOGICAL ACTIVITY

- A rapid fluctuation in temperature (greater than 20 deg C difference within 24-36 hours) will stress the corn crop. For maximum crop safety, allow 48-72 hours for the corn to acclimatize before spraying ULTIM® 37.4 DF Herbicide.
- For ULTIM® 37.4 DF Herbicide used alone or in a tankmix, apply ONLY when the temperature in the 24 hours before AND after application ranges between 5 deg C and 28 deg C. Temperatures beyond this range increase the potential for crop injury. Separate applications of ULTIM® 37.4 DF Herbicide followed by a broadleaf herbicide (minimum 12 hours later) will reduce the potential for injury.
- Ensure that the boom is set at the proper height in relation to the corn plants to apply ULTIM® 37.4 DF Herbicide accurately and uniformly, and to AVOID excessive application into the corn whorl.
- WARNING: Crop injury may result if application is made to corn that has 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. If corn has been injured by frost, wait 48-72 hours before applying ULTIM® 37.4 DF Herbicide.
- When tank mixing ULTIM® 37.4 DF Herbicide with a broadleaf herbicide, always read the

broadleaf herbicide label before using and follow all precautions.

- ULTIM® 37.4 DF Herbicide rapidly stops growth of susceptible species; typical symptoms usually appear within 5-7 days, but may not be noticeable for 2-3 weeks after application, depending on growing conditions and weed susceptibility.
- Warm, moist conditions following application promote the activity of ULTIM® 37.4 DF Herbicide, while cool and/or dry conditions may reduce or delay activity. Weeds hardened off by cold weather or drought stress may not be controlled.
- ULTIM® 37.4 DF Herbicide is a contact herbicide, and will not give residual control of grass or broadleaf weed seedlings that may germinate after application. Weed control may be reduced if the corn canopy has closed in over the weeds, intercepting the spray.

#### **ENVIRONMENTAL HAZARDS:**

- TOXIC to non-target terrestrial plants and aquatic organisms. Observe buffer zones specified under DIRECTIONS FOR USE.
- The use of this chemical may result in contamination of groundwater particularly in areas where soils are permeable (e.g. sandy soil) and/or the depth to the water table is shallow.
- To reduce runoff from treated areas into aquatic habitats, avoid areas with a moderate to steep slope, compacted soil or 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.

#### **CORN HYBRID SENSITIVITY**

Corn hybrids with corn-heat-unit (CHU) ratings of 2500 or less have shown some sensitivity to ULTIM® 37.4 DF Herbicide. **DO NOT USE ULTIM® 37.4 DF HERBICIDE ON CORN HYBRIDS WITH CHU RATINGS OF 2500 OR LESS OR IN GEOGRAPHIC REGIONS HAVING 2500 OR LESS AVERAGE SEASONAL CORN HEAT UNITS.**

Corn hybrids of 2550 CHU or greater that have shown considerable crop injury from applications of ULTIM® 37.4 DF Herbicide are listed below. ULTIM® 37.4 DF Herbicide should not be sprayed for weed control in fields planted with these hybrids.

PIONEER® Brand 3897  
PIONEER® Brand 3936  
PIONEER® Brand 3941  
MAX 78  
G-4120  
G-4034  
G-4160  
Pickseed 2525

Do not use on sweet corn. Do not use on seed corn or popcorn.



## ULTIM® 37.4 DF HERBICIDE USED ALONE

### SPRAY ADJUVANTS

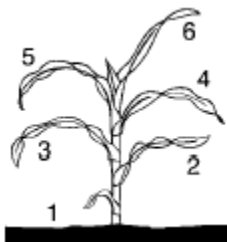
ULTIM® 37.4 DF Herbicide must be applied with a recommended non-ionic surfactant, either CITOWETT\* PLUS, AGRAL\* 90 or AG-SURF\* at 2 L per 1000 L spray solution (0.2% v/v) or SIDEKICK\* at 2.5 L per 1000 L spray solution (0.25% v/v).

### RATES AND TIMING

Apply one water soluble bag/ha of ULTIM® 37.4 DF Herbicide as a broadcast spray, with a recommended surfactant to corn and weeds according to the following chart:

| CROP OR WEED    | LEAF STAGING AT APPLICATION   |
|-----------------|---|
| Corn            | 1-6 leaves (4 visible collars or 30 cm in height - leaf extended)<br>See diagram below. |
| Annual Grasses  | 1-6 leaves (up to early tillering, 2 – two leaf tillers)                                |
| Quackgrass      | 3-6 leaves (10-20 cm in height – leaf extended)   |
| Redroot Pigweed | 2-6 leaves (10 cm tall or across)   |

### CORN LEAF STAGING



Apply ULTIM® 37.4 DF Herbicide from the 1-to-6 leaf stage (4 visible collars or 30 cm in height - leaf extended).

The coleoptile (short, blunt leaf) is counted as the first leaf. A corn leaf is counted as a full leaf when the next leaf is visible in the corn whorl.

If using a tank mixture with another herbicide, refer to the section on tank mixtures for correct timing.

### Directions for Use

- 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, application equipment and sprayer settings.
- DO NOT apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, ditches and wetlands), estuaries or marine habitats.
- DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

#### Field Spray 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 Agriculture Engineers (ASAE) medium classification. Boom height must be 60 cm or less above the crop or ground.
- DO NOT apply by air.

#### 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.

| Method of application | Buffer Zones (metres) Required for the Protection of: |                                   |       |
|-----------------------|---|-----------------------------------|-------|
|                       | Terrestrial Habitat                                   | Aquatic habitats of water depths: |       |
|                       |   | < 1 m                             | > 1 m |
| Field sprayer*        | 5   | 1                                 | 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 a tank mixture is used, consult the labels of the tank-mix partners and use the largest (most restrictive) buffer zone recommended for any of the products.

- Nicosulfuron and rimsulfuron are formulated as wettable granules sealed within a water-soluble package (WSP). Drop intact WSP directly into spray tank. The WSP and pesticide will dissolve readily in water.
- Do not allow the WSP to become wet prior to use. Do not handle individual WSP with wet hands or wet gloves as this may cause breakage. Do not remove WSP from over-wrap container except for immediate use.
- Do not open WSP or attempt to remove the contents from them. The contents are not

designed to be re-measured or subdivided.

- Do not use opened or punctured WSP.
- If broken WSP is found when the over-wrap bag is opened, avoid contact with, and inhalation of the product. Handle with chemical-resistant gloves and dispose of broken WSP according to the DISPOSAL section.

Applications of ULTIM® 37.4 DF Herbicide after the 6-leaf stage of corn (30 cm in height - leaf extended) MUST BE DELAYED UNTIL AFTER THE 8-LEAF STAGE AND BEFORE SILKING, AND WHEN A HEIGHT DIFFERENTIAL CAN BE ESTABLISHED BETWEEN THE CORN AND TARGET WEEDS. When drop piping, ensure that the crop stand is UNIFORM so that all the spray solution is directed below the canopy to keep the spray out of the corn whorl. Application at the later stage must be directed below the corn canopy to keep the spray out of the corn whorl.

#### WEEDS CONTROLLED BY ONE WATER SOLUBLE BAG PER HECTARE

|  |                 |                 |
|--|-----------------|-----------------|
| Barnyard Grass                                 | Proso Millet(2) | Yellow Foxtail† |
| Fall Panicum                                   | Quackgrass(1)   | Old Witchgrass  |
| Green Foxtail                                  |                 |                 |
| Redroot Pigweed (including triazine resistant) |                 |                 |

† suppression only

NOTE: Weeds that emerge after application of ULTIM® 37.4 DF Herbicide will not be controlled. Application should be made when the majority of weeds have emerged.

Annual grasses and redroot pigweed are most sensitive when small and actively growing.

Early crop establishment and a good crop stand (minimum of 50,000 plants per hectare) are important in providing competition for weeds and for effective postemergence control of quackgrass and annual grasses.

#### Specific Weed Control Recommendations:

- (1) Quackgrass - Apply ULTIM® 37.4 DF Herbicide with a recommended surfactant postemergence when the majority of the quackgrass shoots are actively growing and in the 3 to 6-leaf stage (10 to 20 cm in height - leaf extended). If the correct leaf stage of quackgrass does not coincide with the correct leaf stage of broadleaf weeds (see tank mix section of this label), separate applications of ULTIM® 37.4 DF Herbicide and a broadleaf herbicide are required. Annual grasses not emerged at the time of ULTIM® 37.4 DF Herbicide application to quackgrass will not be controlled.
- (2) Proso Millet - Apply ULTIM® 37.4 DF Herbicide with a recommended surfactant postemergence when the majority of proso millet has emerged and before the largest proso millet plants reach the multi-tillered (3 to 4 tillers) stage. If, at correct growth stage for proso millet, corn is beyond the 6-leaf stage, applications of ULTIM® 37.4 DF Herbicide after the 6-leaf stage of corn (30 cm in height - leaf extended) MUST BE DELAYED UNTIL AFTER THE 8-LEAF STAGE OF CORN AND BEFORE SILKING, AND WHEN A HEIGHT DIFFERENTIAL CAN BE ESTABLISHED BETWEEN THE CORN AND PROSO MILLET. When drop piping, ensure that the crop stand is UNIFORM so that all the spray solution is directed below the canopy to keep the spray out of the corn whorl. Reduced control of proso millet may result from this timing of application due to the advanced stage of the weed plants.

## **ULTIM® 37.4 DF HERBICIDE TANK MIXES**

### **ULTIM® 37.4 DF HERBICIDE + BANVEL\***

ULTIM® 37.4 DF Herbicide may be tank mixed with BANVEL\* to control annual grasses, quackgrass and many broadleaf weeds. Tank mix one water soluble bag/ha of ULTIM® 37.4 DF Herbicide and 600 mL/ha of BANVEL\* with a non-ionic surfactant at 0.2% v/v (2 L/1000 L) and apply postemergence to corn up to the 6-leaf stage (4 visible collars or 30 cm in height - leaf extended).

This tank mixture will control the weeds listed for control by ULTIM® 37.4 DF Herbicide alone, plus the weeds listed on the BANVEL\* label. Refer to the "ULTIM® 37.4 DF HERBICIDE USED ALONE" section of this label for more application instructions and restrictions on the use of ULTIM® 37.4 DF Herbicide. Refer to the BANVEL\* label for weeds controlled by BANVEL\* and consult the label for additional application instructions and use precautions.

The tank mix of ULTIM® 37.4 DF Herbicide and BANVEL\* must not be applied after the 6-leaf stage (4 visible collars or 30 cm in height - leaf extended) of corn.

### **ULTIM® 37.4 DF HERBICIDE + BANVEL\* II**

ULTIM® 37.4 DF Herbicide may be tank mixed with BANVEL\* II to control annual grasses, quackgrass and many broadleaf weeds. Tank mix one water soluble bag/ha of ULTIM® 37.4 DF Herbicide and 600 mL/ha of BANVEL\* II with a non-ionic surfactant at 0.2% v/v (2 L/1000 L) and apply postemergence to corn from the spike to the 6-leaf stage (4 visible collars or 30 cm in height - leaf extended).

This tank mixture will control the weeds listed for control by ULTIM® 37.4 DF Herbicide alone, plus the weeds listed on the BANVEL\* II label. Refer to the "ULTIM® 37.4 DF HERBICIDE USED ALONE" section of this label for more application instructions and restrictions on the use of ULTIM® 37.4 DF Herbicide. Refer to the BANVEL\* II label for weeds controlled by BANVEL\* II and for additional application instructions and use precautions.

The tank mix of ULTIM® 37.4 DF Herbicide and BANVEL\* II should be applied at weed stage of emergence to 6 leaf. Do not apply after 6 leaf (4 visible collars or 30 cm tall) stage of corn.

### **ULTIM® 37.4 DF HERBICIDE + DISTINCT\***

ULTIM® 37.4 DF Herbicide may be tank mixed with DISTINCT\* to control annual grasses, quackgrass and many broadleaf weeds. Tank mix one water soluble bag/ha of ULTIM® 37.4 DF Herbicide and 285 grams of DISTINCT\* with a non-ionic surfactant at 0.25% v/v (2.5 L/1000 L) plus liquid urea ammonium nitrate (UAN) at 1.25% v/v (12.5L/1000L) and apply postemergence to corn from the 2- to 6-leaf stage.

This tank mixture will control the weeds listed for control by ULTIM® 37.4 DF Herbicide alone, plus the weeds listed on the DISTINCT\* label. Refer to the "ULTIM® 37.4 DF HERBICIDE USED ALONE" section of this label for more application instructions and restrictions on the use of ULTIM® 37.4 DF Herbicide. Refer to the DISTINCT\* label for weeds controlled by DISTINCT\* and for additional application instructions and use precautions.

The tank mix of ULTIM® 37.4 DF Herbicide and DISTINCT\* should be applied to actively growing weeds at growth stages of emergence to 6-leaf (quackgrass at the 3- to 6-leaf stage). Do not apply after 6-leaf (4 visible collars or 30 cm tall) stage of corn.

#### **ULTIM® 37.4 DF HERBICIDE + MARKSMAN\***

ULTIM® 37.4 DF Herbicide may be tank mixed with MARKSMAN\* to control annual grasses, quackgrass and many broadleaf weeds. Tank mix one water soluble bag/ha of ULTIM® 37.4 DF Herbicide and 2.5 L/ha of MARKSMAN\* with a non-ionic surfactant at 0.2% v/v (2 L/1000 L) and apply postemergence to corn up to the 5-leaf stage.

This tank mixture will control the weeds listed for control by ULTIM® 37.4 DF Herbicide alone (yellow foxtail suppression only), plus velvetleaf (most sensitive when small and actively growing), common ragweed and lamb's-quarters. Refer to the "ULTIM® 37.4 DF HERBICIDE USED ALONE" section of this label for more application instructions and restrictions on the use of ULTIM® 37.4 DF Herbicide. Refer to the MARKSMAN\* label for additional application instructions and use precautions.

The tank mix of ULTIM® 37.4 DF Herbicide and MARKSMAN\* must not be applied after the 5-leaf stage of corn.

#### **ULTIM® 37.4 DF HERBICIDE + PARDNER\***

ULTIM® 37.4 DF Herbicide may be tank mixed with PARDNER\* to control annual grasses, quackgrass and many broadleaf weeds. Tank mix one water soluble bag/ha of ULTIM® 37.4 DF Herbicide and 1.0 L/ha of PARDNER\* with a non-ionic surfactant at 0.2% v/v (2 L/1000 L) and apply postemergence to corn from the 4 to 6-leaf stage (up to 4 visible collars or 30 cm in height - leaf extended).

This tank mixture will control the weeds listed for control by ULTIM® 37.4 DF Herbicide alone, plus the weeds listed on the PARDNER\* label. Refer to the "ULTIM® 37.4 DF HERBICIDE USED ALONE" section of this label for more application instructions and restrictions on the use of ULTIM® 37.4 DF Herbicide. Refer to the PARDNER\* label for weeds controlled by PARDNER\* and consult the label for additional application instructions and use precautions.

Applications of ULTIM® 37.4 DF Herbicide after the 6-leaf stage of corn (30 cm in height - leaf extended) MUST BE DELAYED UNTIL AFTER THE 8-LEAF STAGE AND BEFORE SILKING, AND WHEN A HEIGHT DIFFERENTIAL CAN BE ESTABLISHED BETWEEN THE CORN AND TARGET WEEDS. When drop piping, ensure that the crop stand is UNIFORM so that all the spray solution is directed below the canopy to keep the spray out of the corn whorl.

#### **MIXING INSTRUCTIONS**

1. Fill clean tank about 1/4 full with fresh water.
2. Turn on full agitation.
3. Add the proper amount of ULTIM® 37.4 DF Herbicide to the water in the spray tank with the agitator running. Maintain full agitation until water soluble bags are completely dissolved and

product is fully dispersed. Continuous agitation is required to keep the product in suspension.

4. After ULTIM® 37.4 DF Herbicide has been well mixed and is in suspension add the proper amount (if applicable) of BANVEL\*, BANVEL\* II, DISTINCT\*, MARKSMAN\*, or PARDNER\* to the spray tank with the agitator running. Always add components to the spray tank in the following order: (a) dry formulations in water soluble packaging, (b) other dry materials and finally (c) liquid materials.
5. After ULTIM® 37.4 DF Herbicide (and tank mixed herbicide if applicable) has been well mixed and is in suspension add a recommended non-ionic surfactant such as CITOWETT\* PLUS, AGRAL\* 90, or AG-SURF\* at 2 L per 1000 L spray solution (0.2% v/v) or SIDEKICK\* at 2.5 L per 1000 L spray solution (0.25% v/v).
6. If the tank mix partner is DISTINCT\* add UAN at 12.5 L per 1000 L of water after the surfactant has been well mixed.
7. Fill the remainder of the spray tank.

On repeat tank loads, ensure that the amount of spray solution left in the tank from the previous load is less than 10% of the volume about to be mixed.

Agitation is required for uniform mixing and application. The optimum water volume for ULTIM® 37.4 DF Herbicide application is 140-190 litres of water per hectare (minimum of 100 litres of water per hectare). Use a spray pressure of 175 - 275 kPa. Flat fan nozzles are recommended. Use 50 mesh filter screens or larger. Use spray preparation of ULTIM® 37.4 DF 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.

NOTE: ULTIM® 37.4 DF Herbicide will degrade in acidic or highly alkaline water. Mix no more than can be used in one day. If spraying is interrupted, thoroughly re-agitate the spray mixture before resuming spraying.

NOTE: Do not mix the soluble bags with liquid fertilizers, substances that contain boron or substances that release free chlorine. Mixing the water soluble bags with any of these compounds will result in an insoluble substance in the tank.

#### SPRAYER CLEANUP

To avoid subsequent injury to desirable crops, thoroughly clean all mixing and spray equipment immediately following applications of ULTIM® 37.4 DF Herbicide as follows:

1. Drain tank; thoroughly hose down the interior surfaces of the tank; then flush tank, boom and hoses with clean water for a minimum of 5 minutes.
2. Fill the tank with clean water while adding one litre of household ammonia (containing a minimum of 3% ammonia) for every 100 litres of water. Flush the hoses, boom and nozzles with the cleaning solution and then add more water to completely fill the tank. Circulate the cleaning solution through the tank and hoses for at least 15 minutes. Again flush the hoses, boom and nozzles with the cleaning solution and then drain the 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 the water through the hoses and boom.
6. PRIOR to using the sprayer for the next application, flush the tank, boom and hoses for 5 minutes with fresh water.

**CAUTION:** DO NOT mix 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.

#### USE OF INSECTICIDES

For maximum crop safety, ULTIM® 37.4 DF Herbicide should be applied only to corn which has NOT been treated with a highly systemic organophosphorus soil insecticide. Application of ULTIM® 37.4 DF Herbicide to corn previously treated with FORCE\* (pyrethroid) or FURADAN\* (carbamate) will allow maximum crop safety.

DO NOT tank mix ULTIM® 37.4 DF Herbicide with any organophosphorus insecticide. DO NOT apply a foliar organophosphorus insecticide within 7 days before or after applying ULTIM® 37.4 DF Herbicide.

#### REPLANTING TO OTHER CROPS

ULTIM® 37.4 DF Herbicide is degraded by natural soil processes, and field tests have shown that the following crops may safely be planted at the prescribed interval following corn that has been treated with ULTIM® 37.4 DF Herbicide.

| CROP  | REPLANTING INTERVAL |
|---|---------------------|
| Winter wheat  | 4 months            |
| Spring barley,<br>Canola, Soybeans,<br>White beans, Red<br>Clover, Sorghum,<br>Field Corn | 10 months           |

For other crops, a field bioassay is recommended before planting. A successful field bioassay means growing to maturity a test strip of the crop(s) intended for production the following year.

#### FIELD BIOASSAY

Select a representative area or areas of the field previously treated with ULTIM® 37.4 DF Herbicide to

plant your bioassay crop(s). Be sure to consider factors such as size of field, soil texture, drainage and turn-around areas when selecting the site(s) that are most representative of the soil conditions in the field. On large fields, more than one site may be needed in order to obtain reliable results.

Plant the test strips perpendicular to the direction in which the field was sprayed. The strips should be long enough to cross the width of several spray swaths. Large test strip areas are more reliable than small ones.

Use standard tillage and seeding equipment to plant the bioassay. Prepare a seed bed and plant the crops and varieties you want the option of growing the following year. It is important to use the same planting time, conditions, techniques and cultural practices you normally use to plant and grow the bioassay crop(s). Also plant into an adjacent area not treated with ULTIM® 37.4 DF Herbicide to use as a comparison.

As the crop(s) emerges and grows, examine these key points in ULTIM® 37.4 DF Herbicide treated and non-treated areas:

|                          |                   |                 |
|--------------------------|-------------------|-----------------|
| -crop stand              | -root development | -rate of growth |
| -plant colour and vigour | -yield            |                 |

Allow the bioassay crop(s) to grow to maturity while making your observations. Do not overspray the test strips with herbicides that may damage the bioassay crop(s). If the bioassay indicates that ULTIM® 37.4 DF Herbicide residues are still present, continue cropping only to those crops listed on the label and do not rotate to other crops until bioassay results indicate that susceptible crops are growing normally.

## USE PRECAUTIONS

Do not apply ULTIM® 37.4 DF Herbicide during periods of intense rainfall or to soils saturated with water.

Do not apply directly to standing or running water. Do not apply in areas where surface water from the treatment site can run off to adjacent cropland, either planted or to be planted, or into streams, irrigation water or wells. Applications should only be made when there is no hazard of spray drift contaminating non-target land areas since very small quantities of the ULTIM® 37.4 DF Herbicide spray solution may severely injure susceptible crops during both growing and dormant periods.

As with any herbicide, overlaps or starting, stopping, slowing and turning while spraying may result in crop injury.

Crop injury may result if application is made to corn that has 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.

Under extreme weather conditions, such as hot, dry weather, excessive moisture, or frost, weed control may be reduced.

Rainfall within 2-4 hours after application of ULTIM® 37.4 DF Herbicide may reduce weed control.

Because corn hybrids differ in their tolerance to herbicides, limit first use of ULTIM® 37.4 DF Herbicide to a small area of each hybrid prior to adoption as a field practice.

Overspray or drift to important wildlife habitats such as ponds, wetlands, streams, woodlots and shelterbelts should be avoided.



ULTIM® 37.4 DF Herbicide must not be applied within 30 days of harvest.

**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, ULTIM 37.4 DF Herbicide is a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to ULTIM 37.4 DF 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 ULTIM 37.4 DF Herbicide or other 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 Production Agriscience Canada Company at 1-800-667-3852.

#### STORAGE AND DISPOSAL

**Storage:** Store product in original container only, away from other pesticides, fertilizer, food or feed to prevent contamination. Not for use or storage in or around the home. Keep container closed. Keep water soluble bags in original outer bag away from moisture.

**Disposal:**

1. Do not reuse this container for any purpose. After the container is empty, make it unsuitable for further use.
2. Dispose of the container in accordance with provincial requirements.

#### **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.

#### 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.

The seller warrants that the purchase by the buyer and the use of this product, as such, will not infringe any Canadian patent.

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