

NOTICE TO USER:

The DIRECTIONS FOR USE for the uses described in this label were developed by persons other than Belchim Crop Protection Canada Inc. For these uses, Belchim Crop Protection Canada Inc. has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) under all environmental conditions or for all crop varieties when used in accordance with the label. The user should test the product on a small area first, under local conditions and using standard practices, to confirm the product is suitable for widespread application. Belchim Crop Protection Canada Inc. makes no representation or warranty with respect to performance (efficacy) or crop tolerance (phytotoxicity) claims for this product when used on carrots. Accordingly, the User assume all risks related to performance and crop tolerance arising and agrees to hold Belchim Crop Protection Canada Inc. harmless from any claims based on efficacy or phytotoxicity in connection with the uses described on this label.

EMERGENCY USE LABEL

For sale and use in British Columbia, Saskatchewan, Manitoba, Ontario, Québec, New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland for Control of labelled weeds on Carrots from May 1, 2022 until December 31, 2022

Tough 600 EC Herbicide

AGRICULTURAL

EMULSIFIABLE CONCENTRATE

ACTIVE INGREDIENT: Pyridate:.....600 g/L

READ THE LABEL AND THE BOOKLET BEFORE USING

KEEP OUT OF REACH OF CHILDREN

REGISTRATION NUMBER 34031 PEST CONTROL PRODUCTS ACT

WARNING – SKIN AND EYE IRRITANT

POTENTIAL SKIN SENSITIZER

NET CONTENTS: 1-20,000L

IN CASE OF EMERGENCY INVOLVING A POISONING OR MAJOR SPILL CALL
1-866-336-2983

Belchim Crop Protection NV/SA
Technologielaan 7
1840 Londerzeel
Belgium

Manufactured for:
Belchim Crop Protection Canada Inc.
104 Cooper Drive, Unit 3
Guelph, Ontario N1C 0A4
Tel:1-866-613-3336

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.

PRECAUTIONS

- **KEEP OUT OF THE REACH OF CHILDREN**
- Potential skin sensitizer
- Causes eye and skin irritation. DO NOT get in eyes or on skin.
- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash separately from other laundry before reuse.
- Do not apply by air
- Do not apply this product through any type of irrigation system.
- Do not apply this product when wind conditions will allow drift to adjacent susceptible vegetation.
- Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and chemical-resistant footwear during mixing, loading, application, clean-up and repair. In addition, wear protective eyewear (goggles or face shield) during mixing, loading, clean-up and repair. Gloves are not required within a closed cab.

DO NOT enter or allow worker entry into treated areas to perform postapplication activities during the intervals specified in the following table:

Crop	Postapplication Activity	Restricted-entry Interval (REI) and/or Preharvest Interval (PHI)
Carrots	Harvesting	60 days
	All other activities	12 hours

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

ENVIRONMENTAL PRECAUTIONS

This product contains an active ingredient and aromatic petroleum distillates, which are toxic to aquatic organisms. Toxic to non-target terrestrial plants. Observe spray buffer zones specified under DIRECTIONS FOR USE.

Toxic to small wild mammals.

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 filter strip between the treated area and the edge of the water body.

FIRST AID

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 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 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.

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.

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

TOXICOLOGICAL INFORMATION

Contains petroleum distillate - vomiting may cause aspiration pneumonia.
Treat symptomatically.

<p><i>IN CASE OF EMERGENCY INVOLVING A POISONING OR MAJOR SPILL CALL 1-866-336-2983</i></p>
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STORAGE

Do not freeze. Store in a cool, dry, secure and well ventilated area. Store product in original container only in a location inaccessible to children and pets. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. To prevent contamination store this product away from food or feed. Not for use or storage in or around the home.

DISPOSAL

For recyclable containers.

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

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

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

For refillable containers

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.

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

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, Tough 600 EC is a Group 6 herbicide. Any weed population may contain or develop plants naturally resistant to Tough 600 EC herbicide and other Group 6 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 the 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 Tough 600 EC herbicide or other Group 6 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. 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 chemical control practices.
- Monitor treated weed populations for signs of resistance development. If resistance is suspected, prevent weed seed production in the affected area if possible by an alternative herbicide from a different group. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.

- Have suspected resistant weed seeds tested by a qualified laboratory to confirm resistance and identify alternative herbicide options.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Belchim Crop Protection Canada Inc. at 1-866-613-3336 or visit www.belchimcanada.com

PRODUCT INFORMATION

Tough 600 EC herbicide is a selective herbicide for pre-seed, pre-emergence and post-emergence applications for control or suppression of actively growing annual broadleaf weeds. Tough 600 EC is recommended to be used sequentially with other herbicides as part of a complete weed control program. Tough 600 EC is an emulsifiable concentrate formulation containing 600 g of pyridate per litre of product.

Tough 600 EC is a contact herbicide that is absorbed rapidly by the leaves of plants. Tough 600 EC does not offer any residual weed control. Therefore, only weeds that have emerged at the time of application will be controlled or suppressed. Symptoms in sensitive weeds include marginal yellowing, followed by yellowing and browning of the entire leaf, usually occurring within 4-7 days after application. Activity is more rapid at higher temperatures and when weeds are actively growing. Weed control under adverse conditions such as drought, low temperatures, etc., may be decreased.

Do not apply to any crops other than those listed on the label as crop damage will result. Do not allow spray to drift to adjacent fields seeded to crops other than those crops listed on this label.

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-866-613-3336 or obtain technical advice from the distributor or your provincial agricultural representative.

DIRECTIONS FOR USE

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

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

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 S572.1) medium classification. Boom height must be 60 cm or less above the crop or ground.

Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this

label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

Use Precautions

Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage.

Product Specific Precautions

DO NOT apply by air.

SPRAY BUFFER ZONES

A spray buffer zone is NOT required for:

- uses with hand-held application equipment permitted on this label,
- low-clearance hooded or shielded sprayers that prevent spray contact with crop, fruit or foliage.

The spray 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	Crop	Spray Buffer Zones (metres) Required for the Protection of:				
		Freshwater Habitat of Depths:		Estuarine/Marine Habitat of Depths:		Terrestrial Habitat:
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field sprayer	Carrots	1	1	1	1	1

The spray buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Spray Buffer Zone Calculator on the Pesticides portion of the Canada.ca web site.

Ground Application

Mixing Instructions and Order:

1. Ensure that the sprayer interior is clean, then fill sprayer $\frac{1}{4}$ to $\frac{1}{2}$ full with the required amount of clean water and begin agitation or bypass.
2. Add any WG or DF formulation mix partners into the spray tank and continue to agitate to ensure complete mixing.
3. Add Tough 600EC herbicide and agitate to ensure complete mixing.
4. Add any additional EC formulation mix partners and agitate to ensure complete mixing.
5. Fill sprayer to $\frac{3}{4}$ of the required amount of water.
6. Add any solution (SN or SL) formulation mix partners and agitate to ensure complete mixing.
7. Add any external adjuvant materials at their appropriate ratios to the tank.
8. While continuing to agitate, fill the remainder of the tank with water to the proper level.
9. Spray the herbicide suspension the same day as mixing
10. Do not mix, load or clean spray equipment where there is a potential to contaminate wells or aquatic systems.

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

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

Sprayer Cleanup

Before Spraying: Prior to using Tough 600EC Herbicide, ensure that the spray tank, lines and filter are thoroughly clean.

After Spraying: Thoroughly clean application equipment immediately after spraying. DO NOT allow Tough 600EC Herbicide residues to dry within the spray tank. When using a tank-mix, consult the tank-mix partner label for additional clean-up instructions. The following recommendations are provided

1. Drain and flush tank walls, boom and all hoses for 10 minutes with clean water/detergent mixture. Rinse with clean water. DO NOT clean the sprayer near desirable vegetation, wells or other water sources.
2. Remove all nozzles and screens. Wash separately.
3. Dispose of all rinsate in accordance with provincial regulations.

SPRAYING INSTRUCTIONS:

1. Water Volume: Apply in a minimum spray volume of 100 L/ha OR the volume given in the crop and pest specific instructions tabulated below, whichever is LARGER.
2. Apply at uniform speed and avoid overlapping. Shut off spray boom while starting, turning, slowing or stopping to avoid potential crop injury from over application.

DO NOT apply during periods of dead calm or when wind velocity and direction pose a risk of spray drift.

Crop Tolerance

Tough 600 EC Herbicide has exhibited crop tolerance to labelled crops in development trials when used according to label recommendations and rates. However, Tough 600 EC Herbicide has not been tested on all carrot varieties for tolerance.

Treated carrots may exhibit stunting, chlorosis and/or partial defoliation of the leaves present at the time of application. Leaves that come into contact with the spray may be affected. Carrots usually outgrow these symptoms and continue to grow at a normal rate with no adverse effect on vigour, maturity, or crop yield. To minimize herbicide symptoms, apply to carrots which are actively growing that have sufficiently hardened off and that have a substantial waxy cuticle. Avoid irrigation in the 3 days just prior to herbicide application. Delay application for 3 days after rainfall, cool, or cloudy weather to allow the crop to harden-off. Consult with your Belchim representative prior to adding any surfactants or tank-mix partners not specifically mentioned on this label. Do not apply Tough 600 EC Herbicide when temperatures exceed 25°C, as crop injury may result. Application of Tough 600EC Herbicide is discouraged when the 24-hour temperature difference is >10C, as this may increase the risk of crop injury.

Rotational Crop Information

Tough 600 EC Herbicide offers contact control of susceptible species and has no residual herbicidal activity. Crops rotated following the use of Tough 600 EC Herbicide should not be negatively impacted.

Crop Information

Tough 600 EC Herbicide is a contact herbicide to be used alone or in combination with other herbicides for selective control of certain broadleaf weeds. For optimal weed control, and to minimize weed competition, applications should be made after the weeds have emerged and prior to their reaching 10-15 cm in height.

Tough 600 EC Herbicide may be used as a post-emergent contact herbicide in Carrots for control of labelled weeds that have emerged at the time of application.

Weeds** controlled by Tough 600 EC Herbicide when applied post-emergent, pre-seed and pre-emergent, alone.

Common name	Scientific name	Product Rate
Black nightshade	<i>Solanum nigrum</i>	0.75 L/ha
Redroot pigweed	<i>Amaranthus retroflexus</i>	0.5-0.75 L/ha
Common lamb's quarters	<i>Chenopodium album</i>	0.75 L/ha
False cleavers	<i>Galium spurium</i>	0.5 L/ha

**Weeds which are listed as controlled by Tough 600 EC will be controlled even if they are resistant biotypes of those weeds belonging to the following groups: Group 2:

ALS inhibitors; Group 5: Photosystem II inhibitors; Group 9: EPSP synthase inhibitors.

For optimum results, apply Tough 600EC Herbicide to young, actively growing weeds. Early application will maximize crop yields by reducing weed competition. Weeds emerging after application of Tough 600EC Herbicide will not be controlled.

Prior to applications of Tough 600 EC, registered pre-emergence herbicides may be applied for grass control and may improve control of several of the weeds listed above. Consult these respective labels for directions, precautions and limitations prior to application.

Weed control following application of Tough 600EC Herbicide alone or in combination with grass weed herbicides, can be reduced or delayed under stress conditions such as drought, heat, insufficient fertility, flooding or prolonged cool temperatures. Optimum weed control will be obtained if application of Tough 600EC Herbicide is delayed until the stress conditions have ended and weeds are once again actively growing.

Do not apply to a crop that is stressed by conditions such as frost, low fertility, drought, flooding, disease or insect damage as crop injury may result.

Compatibility Test

Additives should be tested for compatibility by mixing in a small container prior to mixing in the spray tank. In a glass jar (~1 litre size), add all mix partners, in their relative proportions. Invert, shake or mix the jar thoroughly. Though signs of incompatibility will typically be seen within 5 minutes of mixing, mixture should be observed for approximately 30 minutes.

Rate of Use

Carrots

Apply Tough 600 EC at 0.5 to 0.75 l/ha to actively growing carrots in the 2 to 7 leaf stage of crop growth. Do not apply if the crop is under stress caused by nutrients, disease or insects or climatic conditions.

Use an appropriate spray volume that will provide sufficient coverage of the target weeds. Apply Tough 600 EC Herbicide at the high rate when weed pressure is high or for harder to control weeds. Apply to carrots when the weeds are young and actively growing.

Do not make more than one application to carrots.