

# Liberty 150 herbicide

## technology sheet

### Battle herbicide resistance while effectively controlling weeds.

- Dependable, fast, broad-spectrum control of grassy and broadleaf weeds
- Group 10 mode of action provides an exceptional rotation chemistry
- Tank mix with Facet® L herbicide for enhanced cleaver control
- Tank mix with Centurion® herbicide for superior control of grassy weeds

#### Active ingredient

Glufosinate ammonium – Group 10

#### Concentration

150 g/L

#### Formulation

Solution

#### One case contains

2 x 13.5 L jugs  
Also available in 108 L shuttle and 432 L tote

#### Storage

Protect from freezing.



#### Crops

Canola (LibertyLink® varieties only)

#### Staging

cotyledon, prior to bolting

#### Weeds controlled

##### Broadleaves

Canada thistle <sup>1</sup>	1 to 6 leaf (except where indicated)
Cleavers <sup>2</sup>	up to 10 cm height
Common chickweed	1 to 2 whorls
Cow cockle	1 to 4 leaf pairs
Dandelion	1 to 4 leaf
Flixweed	1 to 15 cm rosette
Hemp-nettle	up to 10 cm height
Jimsonweed	1 to 3 leaf pairs
Kochia	up to 8 cm height
Lady's thumb	
Lamb's quarters	
Perennial sow thistle	1 to 8 leaf
Redroot pigweed	1 to 4 leaf
Round-leaved mallow	1 to 4 leaf
Russian thistle	up to 8 cm height
Scentsless chamomile	up to 10 cm height
Shepherd's-purse	
Smartweed	
Stinkweed	1 to 8 leaf
Stork's bill	1 to 3 leaf
Volunteer flax	up to 6 cm height
Wild buckwheat	1 to 3 leaf
Wild mustard	1 to 5 leaf

##### Grasses

	1 to 4 leaf (except where indicated)
Barnyard grass	
Brome grass (downy, Japanese) <sup>3</sup>	1 to 6 leaf
Foxtail barley <sup>4</sup>	
Green foxtail	1 to 6 leaf
Quackgrass <sup>5</sup>	
Volunteer barley <sup>6</sup>	
Volunteer wheat	
Wild oats	

<sup>1</sup> Suppression only.

<sup>2</sup> Tank mix with Facet L herbicide for enhanced cleaver control.

<sup>3</sup> Spring-germinated brome only; best results are obtained after a pre-seed or burndown application with a glyphosate herbicide.

<sup>4</sup> When tank mixed with Centurion® herbicide at 77 ml/ac.

<sup>5</sup> When tank mixed with Centurion at 154 ml/ac.

<sup>6</sup> Suppression only. Tank mix with Centurion herbicide for control.

**BASF**

We create chemistry

### Spray your best.

1. Spray Liberty with a minimum water volume of 10 gallons per acre for good contact and optimal coverage.
2. For enhanced control of cleavers, include Facet L in your Liberty tank mix.
3. For control of difficult grassy weeds such as wild oats, foxtail barley, volunteer barley and others, include Centurion in your tank mix.
4. Liberty performs best when applied on relatively warm (10°C or more) and sunny days. Cloudy skies, windy conditions or days that are either excessively wet or dry can hinder product performance.
5. Aim for medium to coarse droplets of 350 microns.
6. If considering a two-pass system, take the second pass in the reverse direction. Using the same tracks, go back through your crop to target any foliage that could have been sheltered during the first pass.
7. Keep your sprayer speeds under 15 mph to avoid drift and improve control.

### For more information:

Call **AgSolutions** Customer Care at 1-877-371-BASF (2273)

Visit **agsolutions.ca**

### Application rates

**One case of Liberty® herbicide will treat 20 acres, one shuttle will treat 80 acres and one tote will treat 320 acres at the recommended rate of 1.35 L/ac.**

Canola 1.35 to 1.62 L/ac (3.33 to 4 L/ha)<sup>7,8</sup>

### Water volume

Ground application 45 L/ac (10 gal/ac)

Aerial application 22 L/ac (6 gal/ac)

<sup>7</sup> Early timing of first pass at 1.35 to 1.62 L/ac is critical. A second pass of 1.35 to 1.62 L/ac may be applied 10 to 14 days after the first application for flushing weeds.

<sup>8</sup> No more than 4.86 L/ac of Liberty herbicide can be applied in a single season.

### Mixing order

1. Thoroughly clean sprayer with water containing detergent.
2. Fill clean spray tank 1/2 full of water. Start agitation system.
3. **If tank mixing with Centurion herbicide:** Add Amigo<sup>®9</sup> adjuvant, then add Liberty, agitate moderately, then add Centurion, in sequential order.
4. **If tank mixing with Facet L herbicide:** Add Liberty, agitate moderately, then add Facet L, then add Merge<sup>®</sup> adjuvant, in sequential order.
5. **If tank mixing with Facet L and Centurion herbicide:** Add Amigo<sup>9</sup>, then add Liberty, agitate moderately, then add Facet L, followed by Centurion, in sequential order.
6. Continue agitation while adding the remaining amount of water.<sup>10</sup>

<sup>9</sup> Merge adjuvant can be used in place of Amigo. The two adjuvants cannot be mixed together.

<sup>10</sup> Agitate moderately, as over-agitation may cause foaming.

### Pre-harvest interval

60 days after application for canola.

### Follow crops

#### 70 days after application

Barley	Millet	Rye	Triticale
Buckwheat	Oats	Sorghum	Wheat

#### 120 days after application for all other crops except

Alfalfa	Dry common beans	Field corn
Canola	(not grown for seed)	Potato

### Liberty and Trait Agreement (LTA)

First time purchasers of LibertyLink canola or Liberty herbicide need to sign a one-time LTA at your local retailer.

### Tank mixes<sup>11</sup>

**Herbicides for LibertyLink canola:** Centurion, Facet L

Contact **AgSolutions®** Customer Care or your local BASF Sales Representative for additional information on supported tank mixes.

<sup>11</sup> See label for tank mix application rates targeting specific weeds.

**For more information:** Call **AgSolutions** Customer Care at 1-877-371-BASF (2273) or visit **agsolutions.ca**.

### Always read and follow label directions.

**AgSolutions**, **FACET**, **LIBERTY**, **LIBERTYLINK**, and **MERGE** are registered trade-marks of BASF. © 2019 BASF Canada Inc. Amigo, and Centurion are registered trade-marks of Arysta LifeScience North America Corporation.