

BASF

We create chemistry

Heat® LQ

Powered by **Kixor®** Herbicide

HEAT LQ HERBICIDE PRE-HARVEST

STAGING GUIDE





Heat[®] LQ

Powered by **Kixor[®]** Herbicide

Faster harvest. Better weed control.

- Easy-to-use liquid formulation for fast dry down of canola, peas and lentils to improve harvest efficiency
- Improved crop uniformity and harvestability
- Tank mixed with glyphosate, for fast broadleaf weed dry down and cleaner fields next season
- Facilitates straight cutting canola

Tank mixing Heat[®] LQ herbicide with glyphosate pre-harvest applications quickens the rate of crop dry down and reduces the chance of regrowth to improve crop uniformity and facilitate direct combining. It also provides excellent weed control that includes control of fall perennials for cleaner fields next spring. Correct application timing is essential when using Heat LQ in pre-harvest. Use this staging guide to help ensure the best results.



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¹Heat LQ herbicide must be applied after physiological maturity (less than 30% seed moisture).

²When tank mixed with glyphosate, consult glyphosate label or your BASF Sales Representative for information regarding use on specific varieties of dry common beans.

³BASF supports the use of Heat LQ for pre-harvest for red lentils. NOTE: Heat LQ is supported for pre-harvest use on red lentil varieties only. DO NOT apply Heat LQ pre-harvest to green lentils. Please check with your grain buyer prior to the pre-harvest application of Heat LQ in red lentils.

⁴Glyphosate is not registered for pre-harvest use in sunflowers. For sunflowers, use Heat LQ as a standalone product only.



Harvest timing

The dry down of crops will be best under favourable environmental conditions with warm temperatures and low moisture conditions. Weather conditions such as rainfall, cool temperatures and high humidity may slow the plant dry down and keep moisture levels high which can delay the start of harvest after the Heat LQ application.

Application tips

Rainfastness – Heat LQ is extremely rainfast and is only limited by glyphosate. Follow the glyphosate manufacturer’s recommendation for rainfast guidelines.

For best results, be sure to use higher water volumes to maximize coverage and drive sprayers at slower speeds. Use nozzles that point backwards and adjust sprayer pressure for finer droplets. This will help penetrate the canopy, leading to a more thorough and even dry down.



Follow crops

In the spring, following a fall application of Heat LQ.

Barley (spring, malt, winter)

Canary seed

Canola

Chickpeas

Corn (field, sweet)

Field peas

Flax

Forage legumes

Lentils

Oats

Soybeans

Wheat (spring incl. **Clearfield®** wheat, winter, durum)

Follow crops supported (not on current label).

Dry beans

Faba beans

Forage grasses

NOTE: Dry beans, faba beans and forage grasses are supported as follow crops following a fall application of Heat LQ but are not included on the current label.



Application rates

One case of Heat LQ herbicide will treat 40 acres and should be tank mixed with glyphosate. One tote of Heat LQ will treat 1,000 acres.

Heat LQ with glyphosate rate 43 ml/ac (106 ml/ha)

Glyphosate⁵ (360 g ae/L) 1.0 L/ac (2.5 L/ha)

Merge[®] adjuvant⁶ 200 to 400 ml/ac
(0.5 to 1 L/ha)

(BASF recommends always tank mixing Heat LQ with glyphosate.)

(Use both Merge jugs included in the case when applying Heat LQ at 40 acres per case.

Use all Merge in the tote when applying at 1,000 acres per tote.)

Merge adjuvant⁶ 400 ml/ac (1 L/ha)

Water volume

Ground application 40 L/ac (10 gal/ac) min.

(BASF recommends using higher water volumes for best results, specifically on canola.)

Aerial application⁷ 20 L/ac (5 gal/ac)

⁵Glyphosate is not included in the case.

⁶Merge adjuvant is required and included with Heat LQ herbicide. Use all Merge included in the case.

⁷Heat LQ is registered for aerial applications. Some glyphosate formulations are also registered for aerial applications; therefore, Heat LQ plus glyphosate can be applied through aerial applications when both products have aerial registrations.



Heat LQ specifications

- Active ingredient:** Saflufenacil – Group 14
- Formulation:** Water-based suspension concentrate
- One case contains:** 1.73 L jug of Heat LQ herbicide
2 x 8.1 L jugs of Merge adjuvant
- One tote contains:** 4 x 10.79 L of Heat LQ herbicide
with 400 L of Merge adjuvant
- Storage:** Protect from freezing.
Store in cool, dry, ventilated area.

Mixing order

1. Fill clean spray tank 1/2 full of clean water and start agitation.
2. Add the correct amount of Heat LQ herbicide and continue to agitate.
3. Add the correct amount of glyphosate while continuing agitation.
4. Add the correct amount of Merge adjuvant to the tank last.
5. Continue agitation while adding the remaining amount of water.
6. Continue agitation or run the by-pass system.

Canola

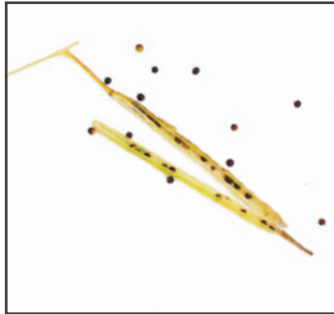
(All types of canola, including LibertyLink®, RoundupReady® and **Clearfield**)

For most canola, harvest can typically commence 2 to 3 weeks after application, when environmental conditions are favourable and the product has been applied at accurate crop staging and tank mixed with glyphosate. Under cool temperatures, overcast conditions, or rainy periods, time from application to harvest may be delayed.

NOTE: Heat LQ should be tank mixed with glyphosate for all applications on canola, including RR systems.

Optimal timing

Apply when 80% of seeds have changed colour. Canola timing for application cannot be determined by pod colour. Pods must be opened to determine the amount of seed colour. Canola flowers upwards, so the lowermost pods will contain the first mature seeds, while the upper pods will contain the last maturing seeds. Seeds on the bottom 2/3 to 3/4 of the main receme will have changed from green to dark brown or black in canola.



Too early for application

Applications may result in yield loss.

Pods have started changing colour, but upon opening the pods to examine seeds, the seeds have not changed colour or just started to change colour. Application prior to correct physiological timing can potentially reduce yield and/or impact quality.



Cereals

Barley (feed varieties only), triticale, wheat (spring, winter, durum)

For barley (feed varieties only), triticale and wheat (spring, winter, durum), harvest can typically commence within 14 days after application, when environmental conditions are favourable and the product has been applied at accurate crop staging. Under cool temperatures, overcast conditions or periods of rain, time from application of Heat LQ to harvest may be delayed.

Optimal timing

Hard dough stage. Cereals turn colour when maturing and sometimes the plant will be completely dry before the kernel is firm. At this stage, the kernel should be firm and when pressed with a thumbnail, the impression is held. Kernel moisture content is approximately 30%.

NOTE: BASF supports the use of Heat LQ herbicide for pre-harvest on feed barley only.



Too early for application

Applications may result in yield loss.

The thumbnail impression does not remain as a dent on the seed. When squeezing the seed, liquid or a semi solid starch can be extracted. Application at this stage may have a negative effect on yield, quality and seed germination.



Chickpeas

For chickpeas, harvest can typically commence within 14 days after application, when environmental conditions are favourable and the product has been applied at accurate crop staging. Under cool temperatures, overcast conditions or periods of rain, time from application of Heat LQ to harvest may be delayed.

Optimal timing

Application timing should occur when the majority of the plants have matured, with only the upper part of the plant remaining green. At this point the seed moisture is at 30% or less. The majority of seeds should have changed colour from green to yellow/brown for Desi type or tan/white for Kabuli type chickpeas.



Too early for application

Applications may result in yield loss.

For both Kabuli and Desi types, the crop may look like it has reached maturity, but it may not be at the recommended stage if the peas inside are green and soft, the pods are brownish, the plants have dried down while the tops are still green, and the fields appear to have green and brown patches. Applying a pre-harvest herbicide at this point may cause a reduction in seed size and quality.



Dry common beans

For dry common beans, harvest can typically commence within 14 days after application, when environmental conditions are favourable and the product has been applied at accurate crop staging. Under cool temperatures, overcast conditions or periods of rain, time from application of Heat LQ to harvest may be delayed.

Optimal timing

The bean crop will have 90% of the pods with a colour change from green to yellow and/or light brown. 80% to 90% of the original leaves have dropped. The stems are green to brown in colour. The pods on the lower canopy mature first, so the few remaining green pods will only be located in the top of the canopy.



Too early for application

Applications may result in yield loss.

Green pods are found all through the canopy, no pods have turned brown yet. Applying a pre-harvest herbicide at this point may cause a reduction in seed size and reduce quality.

NOTE: For more detailed information regarding use of Heat LQ on specific varieties of dry common beans, contact your BASF Sales Representative. When tank mixing with glyphosate, consult the glyphosate label or your BASF Sales Representative.



Field peas

For field peas, harvest can typically commence within 14 days after application, when environmental conditions are favourable and the product has been applied at accurate crop staging. Under cool temperatures, overcast conditions or periods of rain, time from application of Heat LQ to harvest may be delayed.

Optimal timing

Field pea plants ripen over time, therefore all pods will not be dry at the same time. Apply Heat LQ when about 75% of the pods have dried down (turned colour). There will still be about 25% green pods, however, the peas in these pods should be firm.



Too early for application

Applications may result in yield loss.

50% of the pods are still green and the pods that are starting to dry down have peas inside that are still soft and can be split by squeezing. Application prior to correct physiological timing can potentially reduce yield and/or impact quality.



Red lentils

For red lentils, harvest can typically commence within 14 days after application, when environmental conditions are favourable and the product has been applied at accurate crop staging. Under cool temperatures, overcast conditions or periods of rain, time from application of Heat LQ to harvest may be delayed.

Optimal timing

Red lentils are indeterminate in growth and will have a variety of pods in different stages. They may still have green leaves on the plant at pre-harvest application. The lowermost pods of the red lentil plant will ripen first. The majority (>75%) of seeds in the field should be physiologically mature at application; containing less than 30% seed moisture. Gather plants from several different areas in the field and shell out seeds to determine average maturity/drydown of the field. Physiologically mature seeds should be firm when squeezed.

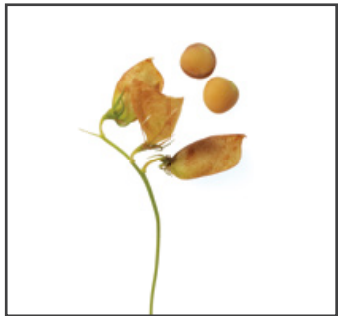


Too early for application

Applications may result in yield loss.

The bottom pods have not ripened. Limited colour change has occurred. The seeds are not firm and no rattling can be heard. Application prior to correct physiological timing can potentially reduce yield and/or impact quality.

NOTE: Heat LQ is registered for use on red lentil varieties only and must be tank mixed with glyphosate since it's no longer registered as a standalone. DO NOT apply Heat LQ to green lentils. Please check with your grain buyer prior to the pre-harvest application of Heat LQ in red lentils.



Soybeans

For soybeans, harvest can typically commence within 2 to 3 weeks after application, when environmental conditions are favourable and the product has been applied at accurate crop staging and tank mixed with glyphosate. Under conditions of cool temperatures, overcast conditions, or periods of rain, time from application of Heat LQ to harvest may be delayed.

Optimal timing

Apply when 90% of the pods in the soybean crop have changed colour, with the lower pods essentially being all brown and the upper pods being a yellowish-brown or grey in some varieties. At this point 80% of the leaves should have dropped with the remaining leaves being yellow.



Too early for application

Applications may result in yield loss.

More than 10% of the pods within the soybean crop are still green. There is limited leaf drop and many green leaves. Application at this time may cause a reduction in yield and seed quality.

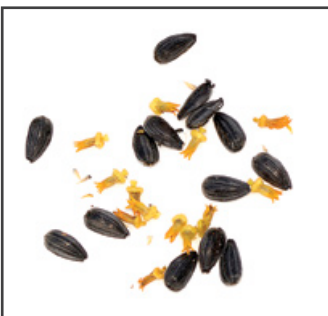


Sunflowers

For sunflowers, harvest can typically commence within 14 days after application, when environmental conditions are favourable and the product has been applied at accurate crop staging. Under cool temperatures, overcast conditions or periods of rain, time from application of Heat LQ to harvest may be delayed.

Optimal timing

The plant should be starting to dry down and the heads drooping. Looking at the back of the sunflower head, the bracts and very back of the heads which are green throughout the season are now turning yellow. The heads feel dry when touched and moisture content is between 20% and 30%.



Too early for application

Applications may result in yield loss.

The sunflower head is not drooping or the back of the head is still green. Application at this stage may cause reduction in seed size and impact seed quality.

NOTE: For sunflowers, Heat LQ is to be used as a standalone product only. Do not tank mix with glyphosate. Please see product label for more details.



Connect with us. We're here for you.

For more information on canola solutions from BASF, reach out to us anytime.

 Visit agsolutions.ca/HeatLQPreharvest

 Contact your local BASF Sales Representative

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

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