Natural desiccation and dry down of sunflower crops can be slow and uneven depending largely on the weather. Seeds dry faster than the head material and are ready to harvest weeks before the head tissue is ready for harvest. Seed moisture is often below 15 percent when the head moisture is still up above 60 percent. That spongy tissue needs to be below 40 percent before it combines easily. Applying a desiccant hasten dry down, resulting in an earlier harvest, limited exposure to blackbirds and less time for disease to continue progressing.

Sunflowers are physiologically mature at the stage R-9. If a desiccant is applied prior to R-9, yield and quality can be sacrificed, and the crop may take longer to dry down.

To determine whether or not the crop has reached physiological maturity, look at the colour of the head. As the plants senesce, the heads turn from green to yellow on the back of the sunflower heads (R-7) in late August. As drydown begins, a brown edge appears first at the tapered top of the bract. The bract tip turns brown at 40-50%. At this stage, seed moisture is too high and the plant has not reached physiological maturity. Gradually, a brown edge line develops down along the bract sides. When the bracts are brown, seed moisture is between 30-35%. The broadest part of the bract should be turning brown. It is at this stage that the seeds are between 30-35% moisture and desiccation can be performed.
PRODUCTS:

**Reglone** - Ground application—0.5 L/ac to 0.7 L/ac

Aerial application 0.7 L/ac to 0.9 L/ac

**HEAT**—71 g/ha (30 ac/jug or 240 ac/case) HEAT used with Merge alone at 1 L/ha (400 mL/ac).

Coverage is critical when desiccating sunflower because the back of the head is so pulpy. Improved coverage will result in increased rate of dry-down.

Helpful hints

Applying at the suggested water volumes - achieve the required coverage for desiccation.

Time the application for when there is “free-water” or dew on the plants. The product will ‘spread’ on the dew = better coverage

Apply in temperatures 20-25°C = faster and more efficient desiccation and dry-down. Plant is active and will be taking in the chemical

Keep an eye on what the weather conditions - a few days of dry weather following the application is optimum - five-day dry weather outlooks with killing frost

If the sunflower is reaching that physiological maturity stage and you’re not expecting a killing frost for two weeks or more, strongly consider using a desiccant, especially if soil moisture is optimum for plant growth. Wet soils are going to push the sunflower to ‘hang on’ longer before starting to dry down naturally.

Drawbacks - If it rains right after desiccation and stays wet for two weeks, your head rot level can actually increase. Desiccating too early, there can be less than the optimum yield.