

ENVIRONMENTAL PRECAUTIONS AND SOIL TYPE RESTRICTIONS - SOUTH DAKOTA

General Information

Product Information

OpTill PRO herbicide is packaged as a dual-chambered jug consisting of two separate formulated components, defined as follows:

1. Dry component: 40 ounces (2.5 pounds) of a saflufenacil and imazethapyr product formulated as a water-dispersible granule.
2. Liquid component: 200 fluid ounces (1.56 gallons) of a dimethenamid-P product formulated as an emulsifiable concentrate.

OpTill PRO provides both contact burndown and residual preemergence broadleaf and grass weed control (refer to Table 1 for lists of weeds controlled) in soybean. Refer to Crop-specific Information section for instructions on herbicide tank mixtures.

Make burndown applications of OpTill PRO when weeds are small and actively growing. An adjuvant is required with OpTill PRO for optimum burndown activity (refer to Additives section for details). Burndown activity may be slowed or reduced under cloudy and/or foggy or cooler weather conditions or when weeds are growing under drought or other stress conditions. When targeting dense weed populations and/or larger broadleaf weeds, use higher spray volumes. Angling nozzles forward (to 45 degrees) may improve penetration of denser weed canopies.

Residual preemergence applications of OpTill PRO must be activated by at least 1/2 inch of rainfall or sprinkler irrigation prior to weed seedling emergence. When OpTill PRO is not activated, a labeled postemergence herbicide or cultivation may be needed to control weed escapes.

Mode of Action

OpTill PRO herbicide contains three herbicide active ingredients. Saflufenacil is a potent inhibitor of protoporphyrinogen-oxidase, belonging to herbicide mode-of-

action Group 14 (WSSA)/Group E (HRAC).

Imazethapyr is a potent inhibitor of acetohydroxyacid synthase, belonging to herbicide mode-of-action Group 2 (WSSA)/Group B (HRAC).

Dimethenamid-P inhibits very long chain fatty acid (VLCFA) synthesis, belonging to the mode-of-action Group 15 (WSSA)/Group K3 (HRAC). The Dry component active ingredients of OpTill PRO are rapidly absorbed by roots and foliage. Plant death is the result of membrane damage and inhibition of the production of branched chain amino acids. Under active growing conditions, susceptible emerged weeds usually develop chlorotic and necrotic injury symptoms within hours and die within a few days.

Susceptible emerging weed seedlings will usually die as they reach the soil surface or shortly after emergence. The Liquid component active ingredient of OpTill PRO is absorbed by roots and shoots of weeds following germination.

Plant death is the result of very long chain fatty acid synthesis inhibition; susceptible weeds typically do not emerge.

Resistance Management

While weed resistance to protoporphyrinogen-oxidase-inhibiting herbicide is relatively infrequent, populations of resistant biotypes to protoporphyrinogen-oxidase or acetohydroxyacid-synthase-inhibiting herbicides are known to exist. Weed resistance to VLCFA synthesis-inhibiting herbicides is rare. Resistance management practices include:

1. Following labeled application rate and weed growth stage instructions
2. Avoiding repeated applications of herbicides with the same mode of action
3. Utilizing tank mixes and sequential applications with other effective herbicides possessing different modes of action
4. Using crop rotation so crop competition, tillage or herbicides with alternative modes of action can be used to control weed escapes

Crop Tolerance

Soybeans are tolerant to OpTill PRO when applied according to label directions as a

preplant to preemergence treatment and under normal environmental conditions. Crop injury may occur under stressful growing conditions (e.g. seedling disease, extreme hot or cold weather, excessive moisture, high soil pH, high soil salt concentration or drought).

Severe crop injury will result if OpTill PRO is applied postemergence (over the top) to soybeans.

Application Instructions

Apply OpTill PRO prior to crop emergence only.

Application Methods and Equipment

OpTill PRO may be applied by either ground or air.

Thorough spray coverage is required for optimum weed control and can be improved with proper adjuvant, nozzle, and spray volume selection.

Use and configure application equipment to provide an adequate spray volume, an accurate and uniform distribution of spray droplets over the treated area, and to avoid spray drift to nontarget areas. Equipment should be adjusted to maintain continuous agitation during spraying with good mechanical or bypass agitation. Avoid overlaps that will increase rates above the use rates specified in the label.

OpTill PRO may only be applied using water as the spray carrier.

Use Precautions

- Maximum seasonal use rate - Refer to the Crop-specific Information section for maximum cropping seasonal application use rates. A cropping season is defined as the period following harvest of the preceding crop through the harvest of the planned or current crop.
- DO NOT apply OpTill PRO after crop emergence or severe crop injury will occur.
- Rainfastness - OpTill PRO is rainfast 1 hour after application.

Burndown activity may be reduced if rain or irrigation occurs within 1 hour of application.

- DO NOT contaminate irrigation ditches or water used for domestic purposes.
- DO NOT apply OpTill PRO through any type of irrigation system (e.g. chemigation).
- Full-rate application of products containing chlorimuron ethyl, chloransulam-methyl, flumetsulam, or imazaquin in the same year as OpTill PRO may increase the risk of injury to sensitive follow crops. Consult the respective labels of these products for recommended uses of these products in combinations.
- Only rotational crops harvested at maturity may be used for feed or food.
- When organophosphate or carbamate insecticides are tank mixed with OpTill PRO, temporary injury may result to the treated crops.
- OpTill PRO is not for sale, distribution, or use in Long Island and Nassau and Suffolk counties in New York State or California.

Crop-specific Information

This section provides use directions for OpTill PRO in soybean.

Be sure to read about product information, mixing, application, weeds controlled and adjuvant instructions in preceding sections of the label. Read and follow tank mix product labels for restrictions, precautions, instructions and rotational crop restrictions.

Depending on specific application directions, OpTill PRO may be applied for burndown control of emerged weeds and/or residual control of germinating weeds (refer to Table 1 for list of weeds controlled) before planting (preplant/preseed) or after planting but before crop emergence.

Depending on the time between OpTill PRO application and planting, a followup in-crop herbicide application may be needed for complete weed control throughout the growing season.

Thorough spray coverage is required for control of emerged broadleaf weeds. High populations and/or variations in size can prevent adequate spray coverage.

Controlling fall-germinated weeds in the spring (e.g. horseweed/marestail) will also require thorough spray coverage.

Use higher spray volumes (e.g. 15 to 20 gallons of water per acre) in these situations to increase spray coverage and optimize burndown activity.

Refer in the label regarding tank mix information.

Limitations, Restrictions, and Exceptions

Environmental Precautions and Soil Type Restrictions

Directions For Use

It is prohibited to use this product in a manner inconsistent with all applicable directions, restrictions, and precautions found in the labeling of the federally registered product and accompanying supplemental labeling. DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Environmental Precautions

Where groundwater is near the surface and the soil is coarse and permeable, agricultural chemicals have potential to contaminate the groundwater. The following restrictions have been developed to protect drinking water supplies.

Point Source Contamination

DO NOT transfer, clean, wash, load, unload, rinse, refill, mix, or empty containers or equipment containing OpTill PRO or any other pesticide product within 150 feet of any well, sinkholes, natural or impounded lakes and reservoirs, perennial or intermittent streams and rivers, or wetlands unless it is done so over a South Dakota Department of Agriculture approved operational area containment. Any spilled material must be immediately recovered. Discharges in excess of 25 pounds active ingredient must be reported to the department. Recovered material must be properly stored and handled until proper disposal or use has occurred. The owner or operator shall provide written documentation to the department describing the cause of the discharge, recovery, and sampling procedures analysis reports, and disposition of the recovered materials within 30 days following the date

the discharge occurred.

Movement Dissolved in Runoff or Through Soil

DO NOT apply under conditions which favor runoff. DO NOT apply to impervious substrates such as paved or highly compacted surfaces or frozen soils. Runoff is minimized through practices that also reduce soil erosion. Slope, grass buffer/filter strips, soil types, tillage practices and drainage conditions must all be considered to prevent contamination of surface water through runoff and erosion.

Groundwater contamination may occur in areas where soils are permeable or coarse and groundwater is near the surface. To minimize the possibility of groundwater contamination, carefully follow application rate recommendations as affected by soil type in the Crop-specific Information section of the main label.

Soil Type Restrictions

In South Dakota, OpTill PRO herbicide application is not permitted on the following listed soils where groundwater is within 30 feet from the surface.

The following South Dakota soils series have sand or fine sand texture described in a horizon depth of 0 to 12 inches and have an organic matter content of 3% or less (based on the NRCS Soils 5 Database). If the water table is less than 30 feet below land surface, DO NOT apply to the following vulnerable sandy soils. If the water table is unknown, DO NOT apply OpTill PRO to a restricted soil.

Soil Series Restricted:

- Bankard
- Inavale
- Seroco
- Banks
- lpage
- Thurman
- Boel
- Lihen
- Trey
- Doger
- Maddock
- Valent
- Dwyer
- Minnewasta
- Valentine

- Els
- Sarpy
- Wortman
- Hopdraw
- Serden
- Zeona

If a field contains several soil types, one of which is a vulnerable soil listed above, and the water table is less than 30 feet, DO NOT apply OpTill PRO.

Restricted Entry Interval

12 hours

EXCEPTION: If the product is soil injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

Timings

[N.A.](#)