### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460



### **EPA** United States Environmental Protection Office of Pesticide Programs Agency Office of Pesticide Programs

Dr. Craig D. Kleppe **BASF** Corporation **Agricultural Products** 26 Davis Dr. Research Triangle Park, NC 27709-3528

APR - 9 2010

Subject:

Label Amendment

EPA Reg. No.: 7969-280

OPTILL Powered by KIXOR® Herbicide

Dear Dr. Kleppe,

The Agency has received your request to amend the labeling for the above-mentioned product, dated January 12, 2010. The labeling, submitted under the Federal Insecticide, Fungicide, and Rodenticide Act, is acceptable, provided the following modifications are made:

- 1. Remove the word, "General" in the headers on pages 4 and 11, as it renders the information beneath it unenforceable. You may replace it with the word, "Product."
- 2. On page 17, in the statement, "There should be an interval.....soybean grain harvest," change the word "should" to "must."

This labeling supersedes all previous accepted labeling for this product. Please submit one (1) copy of the final printed label, incorporating the modifications above, before the product is released for shipment. A stamped copy of the label is enclosed for your records. If you have any questions, please contact Kathryn Montague (703-305-1243 or montague.kathryn@epa.gov).

Sincerely,

Kathryn V. Montague **Product Manager 23** 

Herbicide Branch

Registration Division (7505P)

Wetup V. Montego

# OPTILL

### POWERED BY KIXOR® HERBICIDE



For use in the following agricultural crops: chickpea (garbanzo bean), CLEARFIELD® corn, dry field pea, edible bean, edible pea, lentils, and soybean

**Active Ingredients:** 

saflufenacil: N'-[2-chloro-4-fluoro-5-(3-methyl-2,6-dioxo-4-(trifluoromethyl)-3, 6-dihydro-1(2H)-pyrimidinyl)benzoyl]-N-isopropyl-N-methylsulfamide	17.80%
imazethapyr: (±)-2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1 <i>H</i> -imidazol-2-yl]-5-ethyl-3-pyridinecarboxylic acid	50.20%
Other Ingredients:	32.00%
<b>Total:</b>	30.00%
Contains 0.178 pound active ingredient saflufenacil and 0.502 pound acid equivalent imazethapyr per formulated as a water-dispersible granule (WG).	r pound

EPA Reg. No. 7969-280

EPA Est. No.

## KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See inside for complete First Aid, Precautionary Statements, Directions For Use, Conditions of Sale and Warranty, and state-specific crop and/or use site restrictions.

In case of an emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357).

### **Net Contents:**

BASF Corporation 26 Davis Drive, Research Triangle Park, NC 27709

## ACCEPTED with COMMENTS In EPA Letter Dated:

APR - 9 2010

Under the Federal In. dicide, Fungicide, and Roden...cide Act as amended, for the pesticide registered under EPA Reg. No.

7969-280

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	FIRST AID				
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>				
If swallowed	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>DO NOT induce vomiting unless told to do so by a poison control center or doctor.</li> <li>DO NOT give any liquid to the person.</li> <li>DO NOT give anything by mouth to an unconscious person.</li> </ul>				
If in eyes	<ul> <li>Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>Remove contact lenses, if present, after first 5 minutes; then continue rinsing eyes.</li> <li>Call a poison control center for treatment advice.</li> </ul>				
<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably by mouth to mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>					
	HOTLINE NUMBER				

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact BASF Corporation for emergency medical treatment information at 1-800-832-HELP (4357).

### **Precautionary Statements**

### Hazards to Humans and Domestic Animals

CAUTION. Harmful if absorbed through skin. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Remove and wash contaminated clothing before reuse.

### Personal Protective Equipment (PPE)

Some materials that are chemically resistant to this product are listed below. For more options, refer to Category A on an EPA chemical-resistance category selection chart.

### Applicators and other handlers must wear:

- Protective evewear such as face shield, goggles. or safety glasses
- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves (such as natural rubber, selection Category A)

Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. DO NOT reuse them.

### **Engineering Controls Statement**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**IMPORTANT:** When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for applicators and other handlers and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

### **USER SAFETY RECOMMENDATIONS**

#### **Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothina.

### **Environmental Hazards**

For terrestrial uses, **DO NOT** apply directly to water, areas where surface water is present, or intertidal areas below the mean high water mark. DO NOT contaminate water when disposing of equipment washwaters or rinsate.

Groundwater Advisory. This product has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

Surface Water Advisory. This product may impact surface water due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow groundwater. This product is classified as having high potential for reaching surface water via runoff for several weeks after application. A level, well-maintained buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of this chemical from runoff water and

sediment. Runoff of this product will be reduced by avoiding application when rainfall is forecast to occur within 48 hours.

**Proper Handling Instructions.** This product may not be mixed or loaded within 50 feet of wells (including abandoned wells and drainage wells), sinkholes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas.

Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad must be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on the pad.

Surface water shall not be allowed to either flow over or from the pad, which means the pad must be selfcontained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specific minimum containment capacity **DOES NOT** apply to vehicles when delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

This product must be used in a manner which will prevent back siphoning in wells, spills, or improper disposal of excess pesticide spray mixture.

### **Endangered Species Protection Requirements**

This product may have effects on federally listed threatened or endangered plant species or their critical habitat. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the county or parish in which you are applying the pesticide. To determine whether your county or parish has a Bulletin, and to obtain that Bulletin, consult http://www.epa.gov/espp/, or call 1-800-447-3813 no more than 6 months before using this product. Applicators must use Bulletins that are in effect in the month in which the pesticide will be applied. New Bulletins will generally be available from the above sources 6 months prior to their effective dates.

### **Directions For Use**

It is a violation of federal law to use this product in a manner inconsistent with its labeling. This labeling must be in the possession of the user at time of herbicide application.

**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.

Observe all precautions and limitations in this label and the labels of products used in combination with **OpTill™ herbicide**. The use of **OpTill** not consistent with this label can result in injury to crops, animals or persons. Keep containers closed to avoid spills and contamination.

Unless otherwise directed in supplemental labeling, all applicable directions, restrictions, precautions and **Conditions of Sale and Warranty** are to be followed.

BASF Corporation does not recommend or authorize the use of this product in manufacturing, processing or preparing custom blends with other products for application in crops.

### **AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

**DO NOT** enter or allow worker entry into treated areas during the restricted-entry interval (REI) of **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.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves, such as natural rubber
   ≥ 14 mils
- Shoes plus socks
- Protective eyewear

### STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

### **Pesticide Storage**

DO NOT use or store near heat or open flame. Store in original container in a well-ventilated area separately from fertilizer, feed, or foodstuffs and away from other pesticides. Avoid cross-contamination with other pesticides. Groundwater contamination may be reduced by diking and flooring of permanent liquid bulk storage sites with an impermeable material.

### **Pesticide Disposal**

Wastes resulting from this product may be disposed of on-site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

### Container Disposal

Nonrefillable Container. DO NOT reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recvcling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Triple rinse containers small enough to shake (capacity ≤ 50 pounds) as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or mix tank. Hold container upside down over application equipment or mix tank, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

### In Case of Emergency

In case of large-scale spillage regarding this product, call:

- CHEMTREC
- 1-800-424-9300
- BASF Corporation 1-800-832-HELP (4357)

In case of medical emergency regarding this product, call:

- Your local doctor for immediate treatment
- Your local poison control center (hospital)
- BASF Corporation 1-800-832-HELP (4357)

### Steps to be taken in case material is released or spilled:

- Dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal.
- Remove contaminated clothing and wash affected skin areas with soap and water.
- Wash clothing before reuse.
- Keep the spill out of all sewers and open bodies of water.

### **General Information**

OpTill™ herbicide provides both contact burndown and residual preemergence broadleaf and grass weed control (refer to Table 1 and Table 2 for lists of weeds controlled dependent on application rate). It can be used in CLEARFIELD® corn and specified legume vegetable crops including: chickpea (garbanzo bean), dry field peas, edible beans, edible peas, lentils, lupins and soybean. Refer to **Crop-specific Information** section for recommendations on herbicide tank mixtures or sequential programs.

Make burndown applications of OpTill when weeds are small and actively growing. An adjuvant is required with **OpTill** 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 must be activated by at least 1/2 inch of rainfall or sprinkler irrigation prior to weed seedling emergence. When OpTill is not activated, a labeled postemergence herbicide or cultivation may be needed to control weed escapes.

Table 1. Weeds Controlled by OpTill™ herbicide Applied at 2 ozs/A

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			f Control S = Suppression	Maximum Height or Diameter (inches)
Common Name	Scientific Name	Residual Application	Burndown Application	Burndown Application
Broadleaf Weeds	- Ocientino Ivanie	Application	Application	Арриоацоп
Alligatorweed	Alternanthera philoxeroides		С	4
Amaranth, Palmer <sup>1</sup>	Amaranthus palmeri		C	6
Anoda, spurred	Anoda cristata	С	C	2
Artichoke, Jerusalem	Helianthus tuberosus		C	8
Bedstraw, catchweed	Galium aparine	_	C	3
Beets, wild	Beta vulgaris	_	C	5
Beggarticks, hairy	Bidens pilosa		C	6
Beggarweed, Florida	Desmodium tortuosum		C	6
Bindweed, field	Convolvulus arvensis		S²	6
Buckwheat, wild	Polygonum convolvulus	С	C	3
Buffalobur	Solanum rostratum	S	S	3
Canola, volunteer (rapeseed)	Brassica spp.	C	C	6
Carpetweed	Mollugo verticillata	C	C	6
Chickweed, common	Stellaria media		C	3
Chickweed, mouse-ear	Cerastium vulgatum		C	3
Cocklebur, common	Xanthium strumarium	S	C	8
Cowcockle	Vaccaria pyramidata		C	4
Cress, hoary	Cardaria draba		S	2
Dandelion	Taraxacum officinale		S <sup>2</sup>	6
Eveningprimrose, cutleaf	Oenothera laciniata		C	4
Falseflax, smallseed	Camelina microcarpa		C	4
Filaree, redstem	Erodium cicutarium		S	3
Filaree, whitestem	Erodium moschatum	_	S	3
Fleabane, hairy	Conyza bonariensis		С	6
Fleabane, rough	Erigeron asper	<del></del>	С	3
Flixweed	Descurainia sophia		C	6
Galinsoga	Galinsoga parviflora	С		
Goosefoot, nettleleaf	Chenopodium murale	<del></del>	С	3
Groundcherry, cutleaf	Physalis angulata		C	6
Groundsel, common	Senecio vulgaris		C	4
Henbit	Lamium amplexicaule		S	3
Horseweed (marestail)	Conyza canadensis		C	6
Jimsonweed	Datura stramonium	S	C	3
Knotweed, prostrate	Polygonum aviculare		С	3
Kochia¹	Kochia scoparia	С	C	3
Ladysthumb	Polygonum persicaria	C	C	6
Lambsquarters, common	Chenopodium album	C	C	6
Lambsquarters, narrowleaf	Chenopodium pratericola		C	6

Table 1. Weeds Controlled by OpTill™ herbicide Applied at 2 ozs/A (continued)

			of Control S = Suppression	Maximum Height or Diameter (inches)
Common Name	Scientific Name	Residual	Burndown	Burndown
Broadleaf Weeds (continued)	Scientific Name	Application	Application	Application
Lettuce, miner's	Claytonia perfoliata		C	3
Lettuce, prickly	Lactuca serriola		C	6
Mallow, common	Malva neglecta		C	6
Mallow, little (cheeseweed)	Malva parviflora		C	6
Mallow, Venice	Hibiscus trionum	S	C	6
Marestail (horseweed)	Conyza canadensis		C	6
Marshelder	Iva xanthifolia	С	C	4
Milkweed, common	Asclepias syriaca		C	3
Morningglory, entireleaf	Ipomoea hederacea var. integriuscula	S	C	6
Morningglory, ivyleaf	Ipomoea hederacea	S	C	6
Morningglory, palmleaf	Ipomoea wrightii		C	6
Morningglory, pitted	Ipomoea lacunosa	S	C	6
Morningglory, smallflower	Jacquemontia tamnifolia		C	3
Morningglory, tall	Ipomoea purpurea	S	C	6
Mustard, black	Brassica nigra	C	С	6
Mustard, tumble	Sisymbrium altissimum		C	6
Mustard, wild	Sinapis arvensis	С	С	6
Nettle, burning	Urtica urens		С	4
Nightshade, black	Solanum nigrum	С	С	6
Nightshade, cutleaf	Solanum triflorum		C	6
Nightshade, Eastern black	Solanum ptycanthum	С	С	6
Nightshade, hairy	Solanum saccharoides	С	С	6
Pennycress, field	Thlaspi arvense	<del></del>	С	6
Pepperweed, field	Lepidium campestre		С	3
Pepperweed, Virginia	Lepidium virginicum		С	3
Pigweed, prostrate	Amaranthus blitoides		С	6
Pigweed, redroot	Amaranthus retroflexus	С	С	6
Pigweed, smooth	Amaranthus hybridus	С	С	6
Pigweed, spiny	Amaranthus spinosus	С	С	6
Poinsettia, wild	Euphorbia heterophylla	С		
Puncturevine	Tribulus terrestris	С	С	6
Purslane, common	Portulaca oleracea	С	С	3
Pusley, Florida	Richardia scabra	С	S	3
Radish, wild	Raphanus raphanistrum		S	4
Ragweed, common <sup>1</sup>	Ambrosia artemisiifolia	S	С	6
Ragweed, giant1	Ambrosia trifida	S	С	6
Redmaids	Calandrinia ciliata		С	3
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Table 1. Weeds Controlled by OpTill™ herbicide Applied at 2 ozs/A (continued)

			of Control S = Suppression	Maximum Height or Diameter (inches)
Common Name	Scientific Name	Residual Application	Burndown Application	Burndown Application
Broadleaf Weeds (continued)				
Rocket, London	Sisymbrium irio	_	С	4
Rocket, yellow	Barbarea vulgaris	_	С	3
Sesbania, hemp	Sesbania exaltata		С	4
Shepherd's-purse	Capsella bursa-pastoris	С	С	6
Sida, prickly	Sida spinosa	S	С	6
Smartweed, Pennsylvania	Polygonum pensylvanicum	С	С	6
Smartweed, swamp (seedling)	Polygonum coccineum		С	3
Sowthistle, annual	Sonchus oleraceus		С	6
Sowthistle, spiny	Sonchus asper		С	6
Spurge, petty	Euphorbia peplus		С	3
Spurge, prostrate	Euphorbia supina		S	3
Spurge, spotted	Euphorbia maculata		S	3
Spurry, corn	Spergula arvensis		С	3
Starbur, bristly	Acanthospermum hispidum	energy.	С	2
Sunflower, common	Helianthus annuus	S	С	6
Swinecress	Coronopus didymus		С	3
Tansymustard, green	Descurainia incana		С	3
Tansymustard, pinnate	Descurainia pinnata		С	6
Thistle, Canada	Cirsium arvense		S²	6
Thistle, Russian	Salsola kali	С	С	3
Velvetleaf	Abutilon theophrasti	S	С	6
Watercress, creeping	Coronopus squamatus		С	2
Watercress	Nasturtium officinale		С	3
Waterhemp <sup>1</sup>	Amaranthus tuberculatus		С	6
Willowweed	Epilobium adenocaulon	<del></del>	С	3
Grass Weeds		,		
Barley, volunteer	Hordeum vulgare		S	2
Barnyardgrass	Echinochloa crus-galli	S	S	3
Canarygrass, littleseed	Phalaris minor	S	S	2
Crabgrass, large	Digitaria sanguinalis	S	S	3
Crabgrass, smooth	Digitaria ischaemum	S	S	3
Cupgrass, woolly	Eriochloa villosa		C	3
Foxtail, giant	Setaria faberi	С	C	6
Foxtail, green	Setaria viridis	С	C	3
Foxtail, yellow	Setaria pumila	C	C	3
Goosegrass	Eleusine indica	S		
Johnsongrass (rhizome)	Sorghum vulgare		S	6
Johnsongrass (seedling)	Sorghum vulgare	С	C	8
John Songrass (Scouling)	Corgnoin valgare			J

Table 1. Weeds Controlled by OpTill™ herbicide Applied at 2 ozs/A (continued)

			f Control S = Suppression	Maximum Height or Diameter (inches)
Common Name	Scientific Name	Residual Application	Burndown Application	Burndown Application
Grass Weeds (continued)				
Millet, wild proso	Panicum miliaceum	S	S	3
Oats, volunteer	Avena sativa	<del></del>	S	2
Oats, wild	Avena fatua		S	3
Panicum, fall	Panicum dichotomiflorum	S	<del></del>	
Panicum, Texas	Panicum texanum	S		_
Rice, red	Oryza rufipogon		С	3
Shattercane	Sorghum bicolor	S	С	8
Signalgrass, broadleaf	Brachiaria platyphylla	S	С	8
Wheat, volunteer	Triticum spp.	<del>_</del>	S	2
Sorghum, almum	Sorghum almum	S	С	. 3
Sedges				
Nutsedge, purple	Cyperus rotundus	S²	S²	3
Nutsedge, yellow	Cyperus esculentus	S²	S²	3

<sup>&</sup>lt;sup>1</sup>Populations of noted weeds exist that are known to be resistant to **Group 2/Group B** and/or **Group 14/Group E** herbicides and will not be controlled by herbicides like **OpTIII**. See the **Resistance Management** section for practices to manage and minimize the impact of resistant weeds (e.g. tank mixes or alternation with other herbicide modes of action, crop rotation and mechanical control).

Table 2. Weeds Controlled by OpTill™ herbicide Applied at 1.5 ozs/A

			Level of Control C = Control S = Suppression	
Common Name	Scientific Name	Residual Application	Burndown Application	Burndown Application
Amaranth, Palmer	Amaranthus palmeri	<del></del>	С	5
Bedstraw, catchweed	Galium aparine		С	1
Beets, wild	Beta vulgaris		С	4
Buckwheat, wild	Polygonum convolvulus	С	С	3
Canola, volunteer (rapeseed)	Brassica spp.	<del></del>	С	4
Flixweed	Descurainia sophia		С	3
Horseweed (marestail)	Conyza canadensis		С	6
Knotweed, prostrate	Polygonum aviculare		С	3
Kochia	Kochia scoparia	C¹	С	3
Lambsquarters, common	Chenopodium album	С	С	3
Lettuce, prickly	Lactuca serriola	_	С	3
Mustard, black	Brassica nigra		С	3
Mustard, tumble	Sisymbrium altissimum		С	3
Mustard, wild	Sinapis arvensis	С	С	6

<sup>&</sup>lt;sup>2</sup>Control of seedling stage and suppression of perennial growth stage.

Maximum

Table 2. Weeds Controlled by OpTill™ herbicide Applied at 1.5 ozs/A (continued)

			of Control S = Suppression	Height or Diameter (inches)
Common Name	Scientific Name	Residual Application	Burndown Application	Burndown Application
Nightshade, black	Solanum nigrum	С	С	3
Nightshade, cutleaf	Solanum triflorum	_	С	1
Nightshade, Eastern black	Solanum ptycanthum	С	С	3
Nightshade, hairy	Solanum saccharoides	С	С	3
Pennycress, field	Thlaspi arvense	<del>_</del>	С	6
Pepperweed, field	Lepidium campestre	<del></del>	С	3
Pigweed, prostrate	Amaranthus blitoides	<u>—</u>	С	1
Pigweed, redroot	Amaranthus retroflexus	С	С	4
Pigweed, smooth	Amaranthus hybridus	_	С	4
Puncturevine	Tribulus terrestris		С	5
Rocket, London	Sisymbrium irio		С	3
Shepherd's-purse	Capsella bursa-pastoris	С	С	3
Tansymustard, green	Descurainia incana		C	3
Tansymustard, pinnate	Descurainia pinnata	_	С	3
Thistle, Russian	Salsola kali	С	С	2

<sup>&</sup>lt;sup>1</sup>Populations of noted weeds exist that are known to be resistant to **Group 2/Group B** and/or **Group 14/Group E** herbicides and will not be controlled by herbicides like **OpTill**. See the **Resistance Management** section for practices to manage and minimize the impact of resistant weeds (e.g. tank mixes or alternation with other herbicide modes of action, crop rotation and mechanical control).

### **Mode of Action**

OpTill is a potent inhibitor of both protoporphyrinogen-oxidase, belonging to herbicide mode-of-action Group 14 (WSSA)/Group E (HRAC), and acetohydroxyacid synthase, belonging to herbicide mode-of-action Group 2 (WSSA)/Group B (HRAC). OpTill is 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.

### 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. Resistance management practices include:

- Following labeled application rate and weed growthstage recommendations
- Avoiding repeated applications of herbicides with the same mode of action
- Utilizing tank mixes and sequential applications with other effective herbicides possessing different modes of action

 Using crop rotation so that crop competition, tillage or herbicides with alternative modes of action can be used to control weed escapes

### **Crop Tolerance**

Crops are tolerant to **OpTill** 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** is applied postemergence (over the top) to any crop.

### **Application Instructions**

Apply OpTill™ herbicide prior to crop emergence only.

### **Application Methods and Equipment**

**OpTill** may be applied by either ground or air. Good spray coverage is important 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 this label.

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

### **Aerial Application Requirements**

Water Volume. Use 3 or more gallons of water per acre.

The following measures must be followed to reduce the potential of spray drift to nontarget areas from aerial applications:

- The distance of the outermost nozzles on the boom must not exceed 3/4 the length of the fixed wingspan or 90% of rotor blade diameter.
- Use low-drift nozzles such as straight-stream nozzles (D-8 or larger). DO NOT use nozzles producing a mist droplet spray.
- Nozzles must always point backward parallel with the airstream and never be pointed downward more than 45 degrees.
- 4. Without compromising aircraft safety, applications should be made at a height of 10 feet or less above the crop canopy or tallest plants.
- DO NOT apply during periods of temperature inversions or stable atmospheric conditions.
- 6. Avoid potential adverse effects to nontarget areas by maintaining a (26)<sup>a</sup> foot buffer 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 shrub lands).
- \*The buffer zone size is determined by use rate. Refer to the table below for the minimum buffer zone distance required for the intended use rate. Utilize the appropriate buffer zone distance from the table below in the buffer zone statement above.

**NOTE:** This footnote and table will only appear on master label. It will be removed from the final print container label after the appropriate buffer zone distance is selected.

OpTill Use Rate (ozs/A)	Saflufenacil Use Rate (lb ai/A)	Saflufenacil Use Rate (g ai/ha)	Buffer Zone Distance (feet)
1.0	0.004	13	20
1.5	0.006	19	26
2.0	0.009	25	26

### **Ground Application Requirements**

**Water Volume.** Use 5 or more gallons of water per acre. Thorough coverage of existing vegetation is essential for burndown applications and higher spray volumes may be necessary for better performance.

The following measures must be followed to reduce the potential of spray drift to nontarget areas from ground applications:

- 1. Apply this product using nozzles which deliver medium to coarse spray droplets as defined by ASAE standard S-572 and as shown in nozzle manufacturer's catalogs. Flat-fan nozzles are recommended for burndown applications while flood-jet type nozzles are recommended for residual soil surface applications. Nozzles that deliver coarse spray droplets may be used to reduce spray drift provided spray volume per acre (GPA) is increased to maintain coverage of target (i.e. weeds or soil surface). DO NOT use nozzles that produce fine (e.g. cone) spray droplets.
- 2. Apply this product only when the potential for drift to adjacent nontarget areas is minimal (e.g. when the wind is 10 MPH or less and is blowing away from sensitive areas). DO NOT apply during periods of temperature inversions or stable atmospheric conditions.
- 3. Avoid potential adverse effects to nontarget areas by maintaining a (13)<sup>a</sup> foot buffer between the application area and the **closest downwind edge** of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas, and shrub lands).
- \*The buffer zone size is determined by use rate. Refer to the table below for the minimum buffer zone distance required for the intended use rate. Utilize the appropriate buffer zone distance from the table below in the buffer zone statement above.

**NOTE:** This footnote and table will only appear on master label. It will be removed from the final print container label after the appropriate buffer zone distance is selected.

OpTill Use Rate (ozs/A)	Saflufenacil Use Rate (lb ai/A)	Saflufenacil Use Rate (g ai/ha)	Buffer Zone Distance (feet)
1.0	0.004	13	10
1.5	0.006	19	13
2.0	0.009	25	13

### **Cleaning Spray Equipment**

Clean application equipment thoroughly by using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions, followed by triple rinsing the equipment before and after applying this product.

### **Spray Drift Management**

It is the responsibility of the applicator to avoid spray drift at the application site, especially onto nontarget areas. The interaction of many equipment-related and weather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The applicator should be familiar with and take into account the information covered in the following spray drift reduction advisory information.

**Controlling Droplet Size.** The most effective way to reduce drift potential is to apply the largest droplets that provide sufficient coverage and control.

**Volume.** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

**Pressure. DO NOT** exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

**Number of Nozzles.** Use the minimum number of nozzles that provide uniform coverage.

**Nozzle Type.** Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets.

**Swath Adjustment.** When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the upwind and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the application equipment (e.g. aircraft, ground) upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller droplets, etc.).

**Wind.** Drift potential is lowest between wind speeds of 3 to 10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. If applying at wind speeds less than 3 mph, the applicator must determine if:

- 1. Conditions of temperature inversion exist, or
- Stable atmospheric conditions exist at or below nozzle height.

**DO NOT** make applications into areas of temperature inversions or stable atmospheric conditions.

**NOTE:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

**Wind Erosion.** Avoid treating powdery, dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.

### **Additives**

For optimum burndown activity with **OpTill™ herbicide**, an adjuvant system must be used that includes the following:

Adjuvant	Rate
Methylated seed oil (MSO)	
or	1 gal/100 gals (1% v/v)
Crop oil concentrate (COC)	
PLUS	PLUS
Ammonium sulfate (AMS)	8.5 to 17 lbs/100 gals (1% to 2% w/v)
or	or
Urea ammonium nitrate (UAN)	1.25 to 2.5 gals/100 gals (1.25% to 2.5% v/v)

The use of AMS fertilizer is highly recommended when mixing **OpTill** with glyphosate-based herbicides.

**DO NOT** use a nonionic surfactant (NIS) as a substitute for COC or MSO, or poor performance on broadleaf weeds will occur.

When an adjuvant is to be used with this product, BASF recommends the use of a Chemical Producers and Distributors Association (CPDA) certified adjuvant.

### **General Tank Mixing Information**

**OpTill** may be tank mixed with one or more registered herbicide products according to the specific tank mixing instructions in this label and respective product labels. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Always follow the most restrictive label use directions. Refer to **Crop-specific Information** section for details.

### **Compatibility Test for Mix Components**

Before mixing components, always perform a compatibility jar test.

- For 20 gallons per acre spray volume, use 3.3 cups (800 ml) of water. For other spray volumes, adjust rates accordingly. Only use water from the intended source at the source temperature.
- Add components in the sequence indicated in the mixing order using 2 teaspoons for each pound or 1 teaspoon for each pint of label rate per acre.
- 3. Always cap the jar and invert 10 cycles between component additions.

- 4. When the components have all been added to the jar, let the solution stand for 15 minutes.
- 5. Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface, or fine particles that precipitate to the bottom, or thick (clabbered) texture. If the spray solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is then compatible, use the compatibility agent as directed on its label. If the solution is still incompatible, **DO NOT** mix the ingredients in the same tank.

### **Mixing Order**

- 1. Water Fill tank 1/2 to 3/4 full with clean water and start agitation.
- 2. Agitation Maintain agitation throughout mixing.
- 3. **Inductor** If an inductor is used, rinse it thoroughly after each component has been added.
- 4. Products in PVA bags Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
- Water-soluble additives (including dry and liquid fertilizers such as ammonium sulfate or urea ammonium nitrate)
- Water-dispersible products (such as dry flowables, wettable powders, suspension concentrates, or suspoemulsions)
- 7. Water-soluble products
- 8. **Emulsifiable concentrates** (including crop oil concentrate or methylated seed oil adjuvants)
- 9. Remaining quantity of water
- 10. Maintain agitation throughout application until spraying is completed. If the spray mixture is allowed to settle for any period of time, thorough agitation is essential to resuspend the mixture before spraying is resumed. Continue agitation while spraying.

### **Use Precautions**

- Maximum seasonal use rate Refer to the Cropspecific Information section for maximum cropping seasonal application use rates for each crop and use pattern. 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™ herbicide after crop emergence or severe crop injury will occur.
- Rainfastness OpTill 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** through any type of irrigation system (e.g. chemigation).
- Full rate application of products containing chlorimuron ethyl, chloransulam-methyl, flumetsulam, imazaguin, or

- imazethapyr in the same year as **OpTill** 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, temporary injury may result to the treated crops.
- OpTill is not for sale, distribution, or use in Long Island and Nassau and Suffolk counties in New York State.

### Rotational Crop Restrictions, Crop Rotation, and Emergency Replanting Intervals

Use **Table 3** and its exceptions in the paragraphs following the table to determine the proper interval between **OpTill** application and rotational crop planting. This interval can be used to determine the acceptable planting interval for rotational crops as well as replanting after crop failure (because of environmental factors such as drought, frost or hail, etc.). Be sure to determine the rotational crop interval for tank mix products and utilize the most restrictive interval of all products applied.

Table 3. Rotational Crop Planting and Emergency Replanting Intervals after an Application of OpTill™ herbicide at 2.0 ozs/A

Crop	Rotational Crop Interval (months after application)	
CLEARFIELD® corn	0	
Soybeans	0 to 1ª	
Southern peas	1	
CLEARFIELD® wheat	3	
Alfalfa Clover Edible beans and peas (other than Southern peas) Peanuts Wheat	4	
Rye	4 to 18⁵	
Field corn and field corn grown for seed	8.5	
Barley Tobacco CLEARFIELD® canola CLEARFIELD® sunflower	9.5	
Cotton Lettuce Oats Popcorn Safflower Sorghum Sunflower Sweet corn	18	
Flax Potatoes	26	
Other crops	40°	

\*The planting interval for these crops and rates is further defined in the respective **Crop-specific Information** section of this label. Use the longer interval within listed ranges for indicated crops grown on coarse textured soils with organic matter less than 2.0%.

<sup>b</sup>Use the longest interval for rye grown in North Dakota and Minnesota north of Highway #210.

Following 40 months after an **OpTill** application and before planting any crop not listed elsewhere in the **Rotational Crop Restrictions, Crop Rotation, and Emergency Replanting Intervals**, a successful field bioassay must be completed. The field bioassay consists of a test strip of the intended rotational crop planted across the previously treated field and grown to maturity. The test strip should include low areas and knolls and include variations in soil such as type and pH. If no crop injury is evident in the test strip, the intended rotational crop may be planted the following year. Sugar beet production can be reduced when grown in soil conditions with a pH less than 6.5. If the field is limed to adjust pH prior to planting rotational crops not listed in **Rotational Crop Restrictions**, **Crop Rotation, and Emergency Replanting Intervals**, apply the lime at least 12 months prior to planting the rotational crop.

Use of **OpTill** in accordance with label directions is expected to result in normal growth of rotational crops in most situations. However, various environmental and agronomic factors make it impossible to eliminate all risks associated

with the use of this product and, therefore, rotational crop injury is always possible.

### **Exceptions to Crop Rotation Restrictions**

### **Barley**

(Delaware, Indiana, Kentucky, Maryland, New Jersey, Ohio, Pennsylvania, and Virginia only)

Barley may be planted 4 months following an **OpTill** application in these states.

### **Corn inbred lines**

Corn inbred seed lines may be planted the year following an application of **OpTill**. Growers are directed to contact the seed company for information and recommendations regarding the planting of corn grown for seed in fields treated with **OpTill** the previous year. Because growing conditions, environmental conditions and grower practices are beyond the control of BASF, all risks and consequences associated with planting seed corn inbreds into fields treated previously with **OpTill** shall be assumed by the user.

### Sweet corn and popcorn varieties (Illinois, Indiana, Iowa, Minnesota, Ohio, Tennessee, and Wisconsin only)

Sweet corn and popcorn varieties may be planted the year following an application of OpTill. Some sweet corn and popcorn varieties may be injured when planted at less than 18 months following an application of OpTill. Before planting sweet corn for processing, contact the processor company for information and recommendations regarding the tolerance of sweet corn varieties planned for fields treated with OpTill the previous year. DO NOT plant fresh market sweet corn varieties prior to 18 months after OpTill use. Before planting popcorn, contact the popcorn company for information and recommendations regarding the tolerance of popcorn varieties planned for fields treated with OpTill the previous year. Because growing conditions, environmental conditions and grower practices are beyond the control of BASF, all risks and consequences associated with planting sweet corn or popcorn varieties into fields treated previously with OpTill shall be assumed by the user. Stunting and maturity delay or other adverse effects may result when sweet corn or popcorn are planted following OpTill use.

### Certain vegetable crops

(Alabama, Delaware, Florida, Georgia, Indiana, Kentucky, Maryland, New Jersey, North Carolina, Pennsylvania, South Carolina, and Virginia only)

The following crops may be planted 18 months following the last application of **OpTill**: Bahiagrass, cabbage, cantaloupe, cucumber, Irish potato, onion, sweet pepper transplants, sweet potato transplants, tomato transplants and watermelon.

Field corn and field corn grown for seed (Arizona, Hawaii, Idaho, Montana, Nevada, Oregon, Utah, Washington, and Wyoming)

Plant 9.5 months after OpTill application.



Wheat may be planted 3 months following an **OpTill™ herbicide** application in areas east of Interstate Highway I-35.

When **OpTill** is applied at no more than 1.5 ozs/A to edible legumes in the use areas described, the following rotational restrictions apply: Following an application of **OpTill**, chickpeas and peas may be planted anytime, lentil may be planted 1 month, and barley may be planted 4 months.

### **Crop-specific Information**

This section provides use directions for **OpTill** in specific crops. Be sure to read about general 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 crop application directions, **OpTill** may be applied for burndown control of emerged weeds and/or residual control of germinating weeds (refer to **Table 1** and **Table 2** for lists of weeds controlled dependent on application rate) before planting (preplant/presed) or after planting but before crop emergence. Depending on the time between **OpTill** application and planting, a followup in-crop herbicide application may be needed for complete weed control throughout the growing season.

### CLEARFIELD® Corn

Use **Optill** in **CLEARFIELD** corn production only. Use in non-**CLEARFIELD** corn or after corn emergence will result in crop injury.

### **Application Rate and Timing**

Apply **OpTill** at 2.0 ozs/A in a single application as a preplant burndown, preplant incorporated, or preemergence treatment in **CLEARFIELD** corn (refer to **Table 1** for list of weeds controlled).

### **Crop-specific Restrictions and Limitations**

- Use only in CLEARFIELD corn.
- Not for use in CLEARFIELD corn in California.
- DO NOT apply OpTill in North Dakota and Minnesota (north of Highway #210) in CLEARFIELD corn.
- DO NOT apply OpTill after corn emergence or severe crop injury will occur.
- DO NOT apply OpTill where an at-planting application of an organophosphate or carbamate insecticide(s) is planned or has occurred because severe injury may result.
- DO NOT apply more than 2.0 ozs/A of OpTill per cropping season.
- DO NOT apply more than a maximum cumulative amount of 0.134 lb ai/A saflufenacil per cropping season in CLEARFIELD corn from all product sources.

- DO NOT apply more than 0.063 lb ae/A of imazethapyr per cropping season to CLEARFIELD corn.
- Corn forage and silage can be fed or grazed 80 or more days after application.

### **Tank Mixtures**

Broad-spectrum burndown of additional grasses or broadleaf weeds will require a tank mix. **OpTill** may be tank mixed or applied sequentially with one or more of, but not limited to, the following herbicide products:

- Clarity® herbicide
- G-Max Lite™ herbicide
- Guardsman Max<sup>®</sup> herbicide
- Outlook® herbicide
- Prowl® H₂O herbicide
- atrazine
- glyphosate (e.g. Roundup\* herbicide)
- Harness® herbicide
- Harness® Extra herbicide

### SECTION FOR MASTER LABELING PURPOSES

Legume Vegetables [chickpea, edible bean, edible pea, field pea (dry), lentil and lupin]

**OpTill** may be applied preplant, preplant incorporated or preemergence in legume vegetable crops specified in this section for weed control (refer to **Table 1** or **Table 2** for weeds controlled).

**OpTill** may be tank mixed with other herbicides such as glyphosate for burndown of additional grasses or broadleaf weeds. Refer to the tank mix product labels to confirm that the respective tank mix products are registered for use on the specific legume crop. With burndown applications, an adjuvant system (refer to **Additives** section for details) is required for optimum burndown activity.

Before applying **OpTill** to legume vegetables, verify the selectivity of **OpTill** on your variety with your seed company (supplier) to help avoid potential injury to sensitive varieties.

### **Application Timing**

**Preplant Application.** Apply **OpTill** up to 30 days before planting. Unpredictable residual weed control may result with applications greater than 14 days before planting.

**Preplant Incorporated Application.** Apply **OpTill** up to 1 week before planting. **DO NOT** incorporate deeper than 3 inches.

**Preemergence Application.** Apply **OpTill** immediately after or up to 3 days after planting but prior to crop emergence. **DO NOT** apply when legumes have reached the cracking stage or after emergence or severe crop injury will occur.

### **Application Rate**

A maximum single or cumulative amount of 2.0 ozs/A **OpTill™ herbicide** per cropping season may be applied in legume vegetable crops specified in this section.

**NOTE:** 2.0 ozs of **OpTill** contains 0.023 lb ai/A saflufenacil and 0.063 lb ae/A imazethapyr.

**DO NOT** exceed a maximum cumulative amount of 0.089 lb ai/A of saflufenacil in legume vegetables from all product sources per cropping season.

**DO NOT** exceed a maximum cumulative amount of 0.063 lb ae/A of imazethapyr in legume vegetables from all product sources per cropping season.

See the following specific application rates and timings for the individual legume vegetables crops.

### Chickpeas (garbanzo bean), Dry Edible Pea, English (garden, green) Peas, Lentils, Succulent Peas, and White Lupin

Apply **OpTill** at 1.5 ozs/A preplant burndown, preplant incorporated, or preemergence. A sequential application of **Sharpen™ herbicide** may be made with a minimum of 14 to 30 days between applications.

**NOTE:** 1.5 ozs of **OpTill** contains 0.017 lb ai/A saflufenacil and 0.047 lb ae/A imazethapyr.

**Use Advisory for Lentils.** Lentil injury may be observed depending on factors including rainfall, soil type, seeding depth and variety. Lentils will be more susceptible to injury from **OpTill** on coarse texture and low organic matter soils. Soil residual herbicides may increase the sensitivity of lentils to **OpTill** and should not be combined as a tank mix or sequential treatment in a lentil weed control program.

**Use Advisory for White Lupins. DO NOT** apply **OpTill** to white lupins grown on sand or loamy sand soils.

### **Southern Peas**

Apply **OpTill** up to 2.0 ozs/A for Southern peas preplant burndown or preemergence. A sequential application of **Sharpen** may be made with a minimum of 14 to 30 days between applications.

**NOTE:** 2.0 ozs/A of **OpTill** contains 0.023 lb ai/A saflufenacil and 0.063 lb ae/A imazethapyr.

### **Geographic Restrictions**

(for all legume vegetable crops)

- DO NOT apply OpTill in California, North Dakota, or north of Highway #210 in Minnesota.
- **DO NOT** apply **OpTill** in Arizona on dry field pea and English pea.
- In Michigan or the Delaware, Maryland, and Virginia (DelMarVa) peninsula. DO NOT apply more than 1.0 oz/A of OpTill to sands or loamy sand soils preplant burndown or preemergence.

### Crop-specific Restrictions and Limitations

(for all legume vegetable crops)

- DO NOT make more than one application of OpTill per cropping season.
- DO NOT apply when legumes have reached the cracking stage or after emergence or severe crop injury will occur.
- DO NOT apply OpTill with other products containing Group 14/Group E herbicides (such as sulfentrazone or flumioxazin) as a tank mix or sequential application within 30 days because crop injury may result.
- DO NOT use OpTill on any Phaseolus bean species.
- Refer to Rotational Crop Restrictions,
   Crop Rotation, and Emergency Replanting Intervals section for crop rotation intervals.
- Legume forage and hay may be fed or grazed 65 days or more after application.
- Reduced crop growth, quality, yield and/or delayed maturity may result from OpTill application to legume vegetables.
- Since delayed maturity may result from an OpTill application, timing of harvest may need to be adjusted accordingly.
- DO NOT apply OpTill if legume vegetable planting is to be delayed and chance of frost prior to maturity is likely.
- Plant dry field pea at least 1/2-inch deep to reduce risk of crop injury from OpTill application.
- DO NOT apply OpTill if cold and/or wet conditions are present or predicted to occur within 1 week of application.

### **Tank Mixtures**

**OpTill** may be tank mixed or applied sequentially with one or more of, but not limited to, the following herbicide products:

- Prowl® H₂O herbicide
- Sharpen
- glyphosate (e.g. Roundup® herbicide)

### SECTION FOR CONTAINER LABELING PURPOSES

### Legume Vegetables [chickpea (garbanzo bean), dry field pea, and English (garden, green) peas]

**OpTill™ herbicide** may be applied preplant, preplant incorporated, or preemergence in chickpea (garbanzo bean), dry field peas, and English (garden, green) peas for weed control (refer to **Table 2** for list of weeds controlled).

**OpTill** may be tank mixed with other herbicides such as glyphosate for burndown of additional grasses or broadleaf weeds. Refer to the tank mix product labels to confirm that the respective tank mix products are registered for use on the specific legume crop. With burndown applications, an adjuvant system (refer to **Additives** section for details) is required for optimum burndown activity.

### **Application Timing**

**Preplant Application.** Apply **OpTill** up to 30 days before planting. Unpredictable residual weed control may result with applications greater than 14 days before planting.

**Preplant Incorporated Application.** Apply **OpTill** up to 1 week before planting. **DO NOT** incorporate deeper than 3 inches.

**Preemergence Application.** Apply **OpTill** immediately after or up to 3 days after planting but prior to crop emergence. **DO NOT** apply when legumes have reached the cracking stage or after emergence or severe crop injury will occur.

### **Application Rate**

See the following specific application rates and timings for the individual legume vegetables crops.

**NOTE:** 1.5 ozs of **OpTill** contains 0.017 lb ai/A saflufenacil and 0.047 lb ae/A imazethapyr.

### Chickpeas (garbanzo bean)

Apply **OpTill** at 1.5 ozs/A preplant burndown, preplant incorporated, or preemergence. A sequential application of **Sharpen™ herbicide** may be made with a minimum of 14 days between applications.

### **Dry Field Pea**

Apply **OpTill** at 1.5 ozs/A preplant burndown, preplant incorporated, or preemergence. A sequential application of **Sharpen** may be made with a minimum of 30 days between applications.

### English (garden, green) Peas in Illinois, Iowa, Minnesota, and Wisconsin

Before applying **OpTill** to English peas, verify the selectivity of **OpTill** on your variety with your seed company (supplier) to help avoid potential injury to sensitive varieties.

Apply **OpTill** at 1.5 ozs/A preplant burndown, preplant incorporated, or preemergence. A sequential application of **Sharpen** may be made with a minimum of 30 days between applications.

### **Geographic Restrictions**

(for all legume vegetable crops)

- DO NOT apply OpTill in California, North Dakota, or north of Highway #210 in Minnesota.
- DO NOT apply OpTill in Arizona on dry field pea.
- In Michigan or the Delaware, Maryland, and Virginia (DelMarVa) peninsula. DO NOT apply more than 1.0 oz/A of OpTill to sands or loamy sand soils preplant burndown or preemergence.

### Crop-specific Restrictions and Limitations (for all legume vegetable crops)

- DO NOT make more than one application of OpTill per cropping season.
- DO NOT apply when legumes have reached the cracking stage or after emergence or severe crop injury will occur.
- DO NOT apply more than a maximum cumulative amount of 0.045 lb ai/A of saflufenacil per cropping season from all product sources.
- DO NOT apply more than a maximum cumulative amount of 0.047 lb ae/A of imazethapyr per cropping season from all product sources.
- DO NOT apply OpTill with other products containing Group 14/Group E herbicides (such as sulfentrazone or flumioxazin) as a tank mix or sequential application within 30 days because crop injury may result.
- DO NOT use OpTill on any Phaseolus bean species.
- Refer to Rotational Crop Restrictions,
   Crop Rotation, and Emergency Replanting Intervals section for crop rotation intervals.
- Legume forage and hay may be fed or grazed 65 days or more after application.
- Reduced crop growth, quality, yield and/or delayed maturity may result from OpTill application to legume vegetables.
- Since delayed maturity may result from an OpTill application, timing of harvest may need to be adjusted accordingly.
- **DO NOT** apply **OpTill** if legume vegetable planting is to be delayed and chance of frost prior to maturity is likely.
- Plant dry field pea at least 1/2-inch deep to reduce risk of crop injury from OpTill application.
- DO NOT apply OpTill if cold and/or wet conditions are present or predicted to occur within 1 week of application.

### **Tank Mixtures**

**OpTill™ herbicide** may be tank mixed or applied sequentially with one or more of, but not limited to, the following herbicide products:

- Prowl® H₂O herbicide
- Sharpen™ herbicide
- glyphosate (e.g. Roundup® herbicide)

### Soybean

**OpTill** may be applied preplant or preplant incorporated up to preemergence in soybean for weed control (refer to **Table 1** for list of weeds controlled).

### **Application Rates and Timings**

Apply **OpTill** early preplant up to preemergence at 1.0 to 2.0 ozs/A for burndown and/or residual weed control prior to crop emergence. With burndown applications, an adjuvant system (refer to **Additives** section for details) is required for optimum burndown activity. A sequential application of **Sharpen** may be made with a minimum of 30 days between applications.

**Soybean Planting Interval.** Dependent on soil texture and organic matter, an interval between **OpTill** application and soybean planting may be required (see **Table 4**). These intervals must be observed prior to planting soybeans or crop injury may occur.

Table 4. Minimum Preplant Intervals Required Between OpTill Application and Soybean Planting

Minimum Preplant Interval (days) by Soil Texture and Organic Matter Content		
Soil Texture	Organic Matter	
	≤ 2.0%	> 2.0%
Coarse (Sand, loamy sand, and sandy loam)	DO NOT USE	14
Medium (Silt, silt loam, loam, and sandy clay loam)	14	None
Fine (Sandy clay, silty clay, silty clay loam, clay loam, and clay)	None	None

### **Crop-specific Restrictions and Limitations**

- Not for use in California in soybean.
- DO NOT apply more than 2.0 ozs/A of OpTill in a single application or cumulatively per cropping season.
- DO NOT apply more than a maximum cumulative amount of 0.089 lb ai/A of saflufenacil per cropping season in soybean from all product sources.
- DO NOT apply OpTill to soybean in North Dakota and Minnesota north of Highway #210.

- DO NOT apply when soybeans have reached the cracking stage or after emergence because severe crop injury will result.
- DO NOT apply to soybean grown on coarse textured soils which have less than or equal to 2.0% organic matter.
- DO NOT apply OpTill with other products containing Group 14/Group E (such as sulfentrazone or flumioxazin) as a tank mix or sequential application within 30 days because crop injury may result.
- DO NOT graze or feed treated soybean forage, hay or straw to livestock.
- There should be an interval of at least 85 days between an application of **OpTill** and soybean grain harvest.
- Ensure that the seed row is sufficiently covered with soil to avoid washing and concentration of the herbicide in the seed zone.
- Always use the most restrictive preplant interval of all inclusive herbicides when applying **OpTill** as part of a tank mix.
- USE RESTRICTIONS for Sensitive Soybean
   Varieties. Certain soybean varieties are sensitive to
   OpTill. Consult a BASF representative, crop advisor, or
   seed company agronomist for information on soybean
   varieties sensitive to OpTill. Apply 1.0 to 2.0 ozs/A of
   OpTill early preplant. Wait until there is an accumulation
   of 1 inch of rainfall or irrigation followed by an interval of
   21 days before planting sensitive soybean varieties. This
   interval must be observed prior to planting sensitive soybean varieties or crop injury may occur.

### **Tank Mixtures**

Broad-spectrum burndown of additional grasses or broadleaf weeds will require a tank mix. **OpTill** may be tank mixed with one or more of, but not limited to, the following herbicide products:

- Clarity® herbicide
- Prowl H<sub>2</sub>O
- Scepter® herbicide
- glyphosate (e.g. Roundup)

### **Conditions of Sale and Warranty**

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above.

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