

SPECIMEN

Optill[®]

Powered by Kixor[®] Herbicide

**For use in the following agricultural crops:
chickpea (garbanzo bean), Clearfield[®] corn, dry field pea,
English pea, 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 17.8%

imazethapyr: (±)-2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-ethyl-3-pyridinecarboxylic acid 50.2%

Other Ingredients: 32.0%

Total: 100.0%

Contains 0.178 pound active ingredient saflufenacil and 0.502 pound acid equivalent imazethapyr per pound formulated as a water-dispersible granule (WG).

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:

FIRST AID

If on skin	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • DO NOT induce vomiting unless told to do so by a poison control center or doctor. • DO NOT give any liquid to the person. • DO NOT give anything to an unconscious person.
If in eyes	<ul style="list-style-type: none"> • Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after first 5 minutes; then continue rinsing. • Call a poison control center for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably by mouth to mouth, if possible. • Call a poison control center or doctor for further treatment advice.

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.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Protective eyewear such as face shield, goggles, or safety glasses
- Long-sleeved shirt and long pants
- Chemical-resistant gloves
- Shoes plus socks

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

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 thoroughly with soap and water after handling and 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 clothing.

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 washwater 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 self-contained. 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 directions, restrictions, and precautions in this label and the labels of products used in combination with **Optill® herbicide**. 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 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
- 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 Handling

Nonrefillable Container. DO NOT reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, 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 spill of 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 take if 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.

Product 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, English peas, and soybean. Refer to **Crop-specific Information** section for use directions.

Make burndown application 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 application of **Optill** must be activated by at least 1/2 inch of rainfall or sprinkler irrigation before 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 at 2.0 ozs/A

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

(continued)

Table 1. Weeds Controlled by Optill® herbicide at 2.0 ozs/A (continued)

Common Name	Scientific Name	Level of Control		Maximum Height or Diameter (inches)
		Residual Application	Burndown Application	Burndown Application
Broadleaf Weeds (continued)				
Ladysthumb	<i>Polygonum persicaria</i>	C	C	6
Lambsquarters, common	<i>Chenopodium album</i>	C	C	6
Lambsquarters, narrowleaf	<i>Chenopodium pratericola</i>	—	C	6
Lettuce, miner's	<i>Claytonia perfoliata</i>	—	C	3
Lettuce, prickly	<i>Lactuca serriola</i>	—	C	6
Mallow, common	<i>Malva neglecta</i>	—	C	6
Mallow, little (cheeseweed)	<i>Malva parviflora</i>	—	C	6
Mallow, Venice	<i>Hibiscus trionum</i>	S	C	6
Marestail (horseweed)	<i>Conyza canadensis</i>	—	C	6
Marshelder	<i>Iva xanthifolia</i>	C	C	4
Milkweed, common	<i>Asclepias syriaca</i>	—	C	3
Morningglory, entireleaf	<i>Ipomoea hederacea</i> var. <i>integriuscula</i>	S	C	6
Morningglory, ivyleaf	<i>Ipomoea hederacea</i>	S	C	6
Morningglory, palmleaf	<i>Ipomoea wrightii</i>	—	C	6
Morningglory, pitted	<i>Ipomoea lacunosa</i>	S	C	6
Morningglory, smallflower	<i>Jacquemontia tamnifolia</i>	C	C	3
Morningglory, tall	<i>Ipomoea purpurea</i>	S	C	6
Mustard, black	<i>Brassica nigra</i>	C	C	6
Mustard, tumble	<i>Sisymbrium altissimum</i>	—	C	6
Mustard, wild	<i>Sinapis arvensis</i>	C	C	6
Nettle, burning	<i>Urtica urens</i>	—	C	4
Nightshade, black	<i>Solanum nigrum</i>	C	C	6
Nightshade, cutleaf	<i>Solanum triflorum</i>	—	C	6
Nightshade, Eastern black	<i>Solanum ptycanthum</i>	C	C	6
Nightshade, hairy	<i>Solanum saccharoides</i>	C	C	6
Pennycress, field	<i>Thlaspi arvense</i>	—	C	6
Pepperweed, field	<i>Lepidium campestre</i>	—	C	3
Pepperweed, Virginia	<i>Lepidium virginicum</i>	—	C	3
Pigweed, prostrate	<i>Amaranthus blitoides</i>	—	C	6
Pigweed, redroot	<i>Amaranthus retroflexus</i>	C	C	6
Pigweed, smooth	<i>Amaranthus hybridus</i>	C	C	6
Pigweed, spiny	<i>Amaranthus spinosus</i>	C	C	6
Poinsettia, wild	<i>Euphorbia heterophylla</i>	C	—	—
Puncturevine	<i>Tribulus terrestris</i>	C	C	6
Purslane, common	<i>Portulaca oleracea</i>	C	C	3
Pusley, Florida	<i>Richardia scabra</i>	C	S	3
Radish, wild	<i>Raphanus raphanistrum</i>	—	S	4

(continued)

Table 1. Weeds Controlled by Optill® herbicide at 2.0 ozs/A (continued)

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

(continued)

Table 1. Weeds Controlled by Optill® herbicide at 2.0 ozs/A (continued)

Common Name	Scientific Name	Level of Control		Maximum Height or Diameter
		Residual Application	Burndown Application	Burndown Application
C = Control S = Suppression (inches)				
Grass Weeds (continued)				
Foxtail, yellow	<i>Setaria pumila</i>	C	C	3
Goosegrass	<i>Eleusine indica</i>	S	—	—
Johnsongrass (rhizome)	<i>Sorghum vulgare</i>	—	S	6
Johnsongrass (seedling)	<i>Sorghum vulgare</i>	C	C	8
Millet, wild proso	<i>Panicum miliaceum</i>	S	S	3
Oats, volunteer	<i>Avena sativa</i>	—	S	2
Oats, wild	<i>Avena fatua</i>	—	S	3
Panicum, fall	<i>Panicum dichotomiflorum</i>	S	—	—
Panicum, Texas	<i>Panicum texanum</i>	S	—	—
Rice, red	<i>Oryza rufipogon</i>	—	C	3
Shattercane	<i>Sorghum bicolor</i>	S	C	8
Signalgrass, broadleaf	<i>Brachiaria platyphylla</i>	S	C	8
Wheat, volunteer	<i>Triticum</i> spp.	—	S	2
Sorghum, alnum	<i>Sorghum alnum</i>	S	C	3
Sedges				
Nutsedge, purple	<i>Cyperus rotundus</i>	S ²	S ²	3
Nutsedge, yellow	<i>Cyperus esculentus</i>	S ²	S ²	3

¹ 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).

² Control of seedling stage and suppression of perennial growth stage.

Table 2. Weeds Controlled by Optill® herbicide at 1.5 ozs/A

Common Name	Scientific Name	Level of Control		Maximum Height or Diameter
		Residual Application	Burndown Application	Burndown Application
C = Control S = Suppression (inches)				
Broadleaf Weeds				
Amaranth, Palmer	<i>Amaranthus palmeri</i>	—	C	5
Bedstraw, catchweed	<i>Galium aparine</i>	—	C	1
Beets, wild	<i>Beta vulgaris</i>	—	C	4
Buckwheat, wild	<i>Polygonum convolvulus</i>	C	C	3
Canola, volunteer (rapeseed)	<i>Brassica</i> spp.	—	C	4
Flixweed	<i>Descurainia sophia</i>	—	C	3
Horseweed (marestail)	<i>Conyza canadensis</i>	—	C	6
Knotweed, prostrate	<i>Polygonum aviculare</i>	—	C	3
Kochia	<i>Kochia scoparia</i>	C ¹	C	3
Lambsquarters, common	<i>Chenopodium album</i>	C	C	3

(continued)

Table 2. Weeds Controlled by Optill® herbicide at 1.5 ozs/A (continued)

Common Name	Scientific Name	Level of Control		Maximum Height or Diameter (inches)
		Residual Application	Burndown Application	Burndown Application
Broadleaf Weeds (continued)				
Lettuce, prickly	<i>Lactuca serriola</i>	—	C	3
Mustard, black	<i>Brassica nigra</i>	—	C	3
Mustard, tumble	<i>Sisymbrium altissimum</i>	—	C	3
Mustard, wild	<i>Sinapis arvensis</i>	C	C	6
Nightshade, black	<i>Solanum nigrum</i>	C	C	3
Nightshade, cutleaf	<i>Solanum triflorum</i>	—	C	1
Nightshade, Eastern black	<i>Solanum ptycanthum</i>	C	C	3
Nightshade, hairy	<i>Solanum saccharoides</i>	C	C	3
Pennycress, field	<i>Thlaspi arvense</i>	—	C	6
Pepperweed, field	<i>Lepidium campestre</i>	—	C	3
Pigweed, prostrate	<i>Amaranthus blitoides</i>	—	C	1
Pigweed, redroot	<i>Amaranthus retroflexus</i>	C	C	4
Pigweed, smooth	<i>Amaranthus hybridus</i>	—	C	4
Puncturevine	<i>Tribulus terrestris</i>	—	C	5
Rocket, London	<i>Sisymbrium irio</i>	—	C	3
Shepherd's-purse	<i>Capsella bursa-pastoris</i>	C	C	3
Tansymustard, green	<i>Descurainia incana</i>	—	C	3
Tansymustard, pinnate	<i>Descurainia pinnata</i>	—	C	3
Thistle, Russian	<i>Salsola kali</i>	C	C	2

¹ 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 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:

1. Following labeled application rate and weed growth-stage
2. Avoiding repeated applications of herbicides with the same mode of action
3. Using tank mixes and sequential applications with other effective herbicides possessing different modes of action
4. 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** before crop emergence only.

Application Methods and Equipment

Optill may be applied by 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. Adjust equipment to maintain continuous agitation during spraying with good mechanical or bypass agitation. Avoid overlaps that 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.

Applicators must follow these requirements to reduce the potential of spray drift to nontarget areas from aerial application:

1. 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.
2. Use low-drift nozzles such as straight-stream nozzles (D-8 or larger). **DO NOT** use nozzles producing a mist droplet spray.
3. Nozzles must always point backward parallel with the airstream and never be pointed downward more than 45 degrees.
4. Without compromising aircraft safety, application should be made at a height of 10 feet or less above the crop canopy or tallest plants.
5. **DO NOT** apply during periods of temperature inversion or stable atmospheric conditions.
6. Avoid potential adverse effects to nontarget areas by maintaining a 26-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).

Ground Application Requirements

Water Volume. Use 5 or more gallons of water per treated acre for weed control application. Thorough spray coverage is required for control of emerged broadleaf weeds. High populations and/or variations in size can prevent thorough 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.

Applicators must follow these requirements 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 burn-down applications while flood-jet type nozzles are recommended for residual soil surface application. 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 inversion or stable atmospheric conditions.
3. Avoid potential adverse effects to nontarget areas by maintaining a 13-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).

Cleaning Spray Equipment

Clean application equipment thoroughly 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
2. 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) ¹	1 gal/100 gals (1% v/v) ²
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)

¹ MSO-based adjuvant **MUST** contain at least 60% methylated seed oil. Poor performance may occur with adjuvants containing less than 60% methylated seed oil.

² **DO NOT** use less than 1 pint/A of MSO with low-volume (< 12.5 gallons per acre) aerial or ground applications.

Use of AMS fertilizer is highly recommended when mixing **Optill** with glyphosate-based herbicides.

DO NOT use nonionic surfactant (NIS) as a substitute for 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.

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. It is

the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. Refer to **Crop-specific Information** section for details.

Tank mixes with contact herbicides (e.g. carfentrazone, paraquat) may reduce the burndown activity of **Optill**.

Compatibility Test for Mix Components

Before mixing components, always perform a compatibility jar test.

1. 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.
2. Add components in the sequence indicated in **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, 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

Maintain constant agitation throughout mixing and application until spraying is completed.

1. **Water** - Fill tank 1/2 to 3/4 full with clean water and start agitation.
2. **Inductor** - If an inductor is used, rinse it thoroughly after each component has been added.
3. **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.
4. **Water-soluble additives** (including dry and liquid fertilizers such as AMS or UAN)
5. **Water-dispersible products** (such as dry flowables, wettable powders, suspension concentrates, or suspo-emulsions)
6. **Water-soluble products**
7. **Emulsifiable concentrates** (including MSO adjuvants)
8. **Remaining quantity of water**

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 Restrictions

- **Maximum seasonal use rate** - Refer to the **Crop-specific 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.
- **DO NOT** contaminate irrigation ditches or water used for domestic purposes.
- **DO NOT** apply **Optill** through any type of irrigation system (e.g. chemigation).
- **Optill is not for sale, distribution, or use in Nassau and Suffolk counties in New York State.**

Use Precautions

- **Optill** will cause severe crop injury if applied after crop emergence.
- Full rate application of products containing chlorimuron ethyl, chloransulam-methyl, flumetsulam, imazaquin, 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.
- **Rainfastness** - **Optill** is rainfast 1 hour after application. Burndown activity may be reduced if rain or irrigation occurs within 1 hour of application.

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 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.). Determine the rotational crop interval for tank mix* products and use the most restrictive interval of all products applied.

* Refer to **Tank Mixing Information** section for further instructions.

Table 3. Rotational Crop Planting and Emergency Replanting Intervals after application of Optill at 2.0 ozs/A

Crop	Rotational Crop Interval (months after application)
Clearfield® corn	0
Soybeans	0 to 1 ^a
Southern peas	1
Clearfield® wheat	3
Alfalfa Clover Edible beans and peas (other than Southern peas) Peanuts Wheat	4
Rye	4 to 18 ^b
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 ^c

^a 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%.

^b Use the longest interval for rye grown in North Dakota and Minnesota north of Highway #210.

^c 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 before planting rotational crops not listed in **Rotational Crop Restrictions, Crop Rotation, and Emergency Replanting Intervals**, apply the lime at least 12 months before 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**[®] herbicide 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 before 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 to the extent consistent with applicable law, 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

Wheat may be planted 3 months following an **Optill** 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**, chick-peas 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. Read product information, mixing, application, weeds controlled and adjuvant instructions in preceding sections of the label. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

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/preseed) 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.

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) also requires 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.

Clearfield[®] Corn

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

Application Method, 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

- 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.

- **DO NOT** apply **Optill® herbicide** where an at-planting application of an organophosphate or carbamate insecticide(s) is planned or has occurred.

EXCEPTION: Optill may be applied when **Aztec® insecticide** or **Fortress® insecticide** is applied at planting as a band, T-band, or in-furrow. **Optill** may be applied with all other classes of at-planting insecticides including pyrethroids, neonicotinoids, and fipronil.

- **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 Mixes

Broad-spectrum burndown of additional grasses or broadleaf weeds requires 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**
- **Outlook® herbicide**
- **Prowl® H₂O herbicide**
- atrazine
- glyphosate (e.g. **Roundup® herbicide**)
- **Harness® herbicide**
- **Harness® Extra herbicide**

* Refer to **Tank Mixing Information** section for further instructions.

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

Optill 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). With burndown application, an adjuvant system (refer to **Additives** section for details) is required for optimum burndown activity.

Application Method and Timing

Preplant Application

Apply **Optill** within 30 days of planting. Unpredictable residual weed control may result with application more than 14 days before planting.

Preplant Incorporated Application

Apply **Optill** within 1 week of planting. **DO NOT** incorporate deeper than 3 inches.

Preemergence Application

Apply **Optill** immediately after or up to 3 days after planting but before crop emergence. **DO NOT** apply when legumes have reached the cracking stage or after emergence.

Application Rate

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

Dry Field Pea

Apply **Optill** at 1.5 ozs/A preplant burndown, preplant incorporated, or preemergence.

English (garden, green) Peas in Illinois, Iowa, Minnesota, New York, 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® herbicide** 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

(for all legume vegetable crops)

- **DO NOT** apply **Optill** more than one time per cropping season.
- **DO NOT** apply when legumes have reached the cracking stage or after emergence.
- **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.
- **Preharvest Interval (PHI)** legume forage and hay, feeding or grazing: 65 days
- **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 of planting.

- **DO NOT** use **Optill® herbicide** on any *Phaseolus* bean species.
- **DO NOT** apply **Optill** if legume vegetable planting is to be delayed and chance of frost before maturity is likely.
- **DO NOT** apply **Optill** if cold and/or wet conditions are present or predicted to occur within 1 week of application.

Crop-specific Precautions

- Refer to **Rotational Crop Restrictions, Crop Rotation, and Emergency Replanting Intervals** section for crop rotation intervals.
- 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.
- Plant dry field pea at least 1/2-inch deep to reduce risk of crop injury from **Optill** application.

Tank Mixes

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® herbicide**
- glyphosate (e.g. **Roundup® herbicide**)

* Refer to **Tank Mixing Information** section for further instructions.

Soybean

Optill may be applied in the fall and/or in the spring as a preplant or preemergence burndown application in reduced or no-till soybean or preemergence in conventional-till soybean for weed control (refer to **Table 1** for list of weeds controlled). An adjuvant system (refer to **Additives** section for details) is required for optimum burndown activity.

Application Method, Rate, and Timing

Fall Application

Apply **Optill** at 2.0 ozs/A for burndown broadleaf weed control after the prior crop is harvested. Application must be made before first killing frost. Fall applications can be made to all soil types.

Spring Application

Apply **Optill** early preplant through preemergence at 2.0 ozs/A for burndown and/or residual weed control before crop emergence. A sequential application of **Sharpen** at 1.0 and 2.0 fl ozs/A may be made with a minimum of 30 and 60 days between applications, respectively.

For enhanced burndown broadleaf weed control, tank mix* apply **Optill** at 2.0 ozs/A plus **Sharpen**. **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. When using this tank mix, add 14 days to the minimum preplant intervals listed in **Table 4**.

* Refer to **Tank Mixing Information** section for further instructions.

Soybean Planting Interval

Depending on soil texture and organic matter, an interval between **Optill** application and soybean planting may be required (see **Table 4** and **Table 5**). This interval must be observed before planting soybean.

Table 4. Minimum Soybean Planting Interval

Minimum Preplant Interval (days) Required between Optill Application and Soybean Planting		
Soil Texture	Organic Matter	
	≤ 2.0%	> 2.0%
Coarse (Sand, loamy sand, and sandy loam)	30	None
Medium (Silt, silt loam, loam, and sandy clay loam)	None	None
Fine (Sandy clay, silty clay, silty clay loam, clay loam, and clay)	None	None

Table 5. Minimum Soybean Planting Intervals when **Optill is Applied with other Group 14/Group E Herbicides**

Minimum Preplant Interval (days) Required between Optill Application and Soybean Planting when Tank Mixed or Sequentially Applied with a Group 14/Group E Herbicide ¹		
Soil Texture	Organic Matter	
	≤ 2.0%	> 2.0%
Coarse (Sand, loamy sand, and sandy loam)	30	14*
Medium (Silt, silt loam, loam, and sandy clay loam)	14*	14*
Fine (Sandy clay, silty clay, silty clay loam, clay loam, and clay)	14*	14*

¹ **Group 14/Group E** herbicides such as sulfentrazone or flumioxazin
*Interval for reduced-till and no-till soybean only. Interval for conventional-till soybean is 30 days.

Crop-specific Restrictions

- Not for use in California in soybean.
- **DO NOT** apply more than 2.0 ozs/A of **Optill® herbicide** (0.022 lb ai/A of saflufenacil and 0.063 lb ae/A imazethapyr) 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.
- **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 14 days of planting.
- Other **Group 14/Group E** herbicides labeled for postemergence application in soybean may be used 14 days after soybean emergence. Refer to other products' labels for use directions.
- **DO NOT** graze or feed treated soybean forage, hay or straw to livestock.
- There must be an interval of at least 85 days between an application of **Optill** and soybean grain harvest.

Crop-specific Precautions

- Ensure 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.

Tank Mixes

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

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

* Refer to **Tank Mixing Information** section for further instructions.

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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TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, EXEMPLARY, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

BASF and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing **Conditions of Sale and Warranty** which may be varied only by agreement in writing signed by a duly authorized representative of BASF.

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