
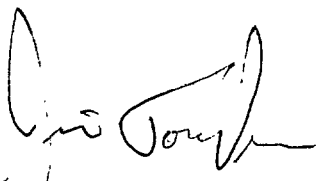


7969-279

09-15-2009

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 <p align="center"><b>U.S. ENVIRONMENTAL PROTECTION AGENCY</b> Office of Pesticide Programs Registration Division (7505P) Ariel Rios Building 1200 Pennsylvania Ave., NW Washington, D.C. 20460</p>	EPA Reg. Number: 7969-279	Date of Issuance:  SEP 15 2009
	Term of Issuance: <b>conditional</b>	
	Name of Pesticide Product: <b>Integrity™ Powered By Kixor® Herbicide</b>	
<p align="center">NOTICE OF PESTICIDE:</p> <p align="center"><input checked="" type="checkbox"/> Registration <input type="checkbox"/> Reregistration (under FIFRA, as amended)</p>		
<p>Name and Address of Registrant (include ZIP Code):</p> <p>BASF Corporation 26 Davis Dr. Research Triangle Park, NC 27709</p>		
<p><b>Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.</b></p>		
<p>On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.</p> <p>This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:</p> <ol style="list-style-type: none"> <li>1. Submit and/or cite all data required for registration/re-registration review of your product when the Agency requires all registrants of similar products to submit data.</li> <li>2. Submit the data listed below:             <ol style="list-style-type: none"> <li>a. 830.6317 (one year storage stability) and 830.6320 (corrosion characteristics). The observations must be made at 0, 3, 6, 9, &amp; 12 month intervals. These studies must be conducted under the full GLP requirements in compliance with 40CFR§160</li> <li>b. 850.3020: Honeybee acute contact study using this formulation. [Note: This study has been submitted to the Agency and is currently under review (MRID #477962-01)].</li> </ol> </li> <li>3. Make the following label changes:             <ol style="list-style-type: none"> <li>a. First Aid Statements: Note that the "If Inhaled" statement is optional</li> <li>b. Agricultural Use Requirements – Restricted Entry Interval (REI): Based on the acute toxicity of the technical grade active ingredients in this product, a 12-hour REI is in compliance with the WPS. The REI for this product may therefore be changed to 12 hours instead of 24 hours.</li> </ol> </li> </ol>		
<p>Signature of Approving Official:</p> <p>Jim Tompkins Product Manager 25 Herbicide Branch Registration Division (7505P)</p> 	<p>Date:</p> <p align="center">SEP 15 2009</p>	

Comments, page 2  
EPA Reg. No. 7969-279

- a. Page 11, aerial application requirements:
  - i. point 1: Add the word, "fixed" before the word, "wingspan." Add the words, "blade diameter," after the word, "rotor."
  - ii. Point 5: Add the words, "or stable atmospheric conditions," after the word, "inversions."
- b. Page 11, Ground Application Requirements:
  - i. Point 2: Add the words, "or stable atmospheric conditions," after the word, "inversions."

4. Submit one copy of the revised final printed label for the record.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records



The Chemical Company

Group 14 15 Herbicide

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# INTEGRITY™ X™

POWERED BY KIXOR® HERBICIDE

For use in field corn (grain, seed, silage), popcorn, sweet corn, and grain sorghum

**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 . . . . .	6.24%
dimethenamid-P: (S)-(2-chloro-N-[(1-methyl-2-methoxy)ethyl]-N-(2,4-dimethyl-thien-3-yl)-acetamide . . . . .	55.04%

**Other Ingredients\*\*:** . . . . . 38.72%

**Total:** . . . . . 100.00%

\* Contains 0.57 pounds of saflufenacil and 5.0 pounds of dimethenamid-P per gallon, formulated as an emulsifiable concentrate.

\*\* Contains petroleum distillates.

EPA Reg. No. 7969-xxx

EPA Est. No.

## KEEP OUT OF REACH OF CHILDREN WARNING/AVISO

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:**

SEP 7 5 2009  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.

7969-279

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<b>FIRST AID</b>	
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes; then continue rinsing eyes.</li> <li>• Call a poison control center for treatment advice.</li> </ul>
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• <b>DO NOT</b> induce vomiting unless told to by a poison control center or doctor.</li> <li>• <b>DO NOT</b> give any liquid to the person.</li> <li>• <b>DO NOT</b> give anything by mouth to an unconscious person.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <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>
<b>If inhaled</b>	<ul style="list-style-type: none"> <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>
<b>HOTLINE NUMBER</b>	
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: 1-800-832-HELP (4357).	
<b>Note to Physician:</b> Contains petroleum distillate. Vomiting may cause aspiration pneumonia.	

### Precautionary Statements

#### Hazards to Humans and Domestic Animals

**WARNING.** Causes substantial but temporary eye injury. Harmful if swallowed. **DO NOT** get in eyes or on clothing. Avoid contact with skin. Wear protective eyewear such as face shield, goggles, or safety glasses. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

#### Personal Protective Equipment (PPE)

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

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves, such as barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, viton ≥ 14 mils, or selection **Category F**
- Protective eyewear such as face shield, goggles, or safety glasses

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 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 washwaters or rinsate.

**Groundwater Advisory.** Saflufenacil 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. Dimethenamid-P has properties that may result in groundwater contamination. Application in areas where soils are permeable or coarse and groundwater is near the surface could result in groundwater contamination.

**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.

**Point-source Contamination.** To prevent point-source contamination, **DO NOT** mix or load this or any other pesticide product 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 dike mixing/loading areas described as follows.

Mixing, loading, rinsing, or washing operations performed within 50 feet of a well are allowed only when conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be on or move across the pad. The pad must be self-contained to prevent surface water flow over or from the pad. The pad capacity must be maintained at 110% that of the largest pesticide container or application equipment used on the pad and have sufficient capacity to contain all product spills, equipment or container leaks, equipment washwaters, and rainwater that may fall on the pad. The containment capacity does not apply to vehicles delivering pesticide shipments to the mixing and/or loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Care must be taken when using this product to prevent:

- Back siphoning into wells
- Spills
- Improper disposal of excess pesticide, spray mixes, or rinsates

Check valves or anti-siphoning devices must be used on all mixing equipment.

**Movement Dissolved in Runoff or Through Soil.**

**DO NOT** apply under conditions that favor runoff.

**DO NOT** apply to impervious substrates such as paved or highly compacted surfaces or frozen soils. Groundwater contamination may occur in areas where soils are permeable or coarse and groundwater is near the surface. To minimize the possibility of groundwater contamination, carefully follow application rate recommendations as

affected by soil type in the **Application Instructions** section of this label. **DO NOT** apply if all 3 criteria exist:

1. Coarse soils classified as sand (does not include loamy sand or sandy loam)
2. Less than 3% organic matter (as determined by soil tests, if not known)
3. Where depth to groundwater is 30 feet or less

**Movement by Water Erosion of Treated Soil. DO NOT** apply or incorporate this product by flood or furrow irrigation. Ensure treated areas have received at least 1/2 inch of rainfall before using tailwater for subsequent irrigation of other fields.

**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.

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**Directions For Use**

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It is a violation of federal law to use this product in a manner inconsistent with its labeling. This label 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 **Integrity™ herbicide**. The use of **Integrity** 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 **24 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 barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils or viton ≥ 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 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 ≤ 5 gallons) as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. 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.

(continued)

**STORAGE AND DISPOSAL** (continued)

**Container Disposal** (continued)

**Refillable Container.** Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

**Triple rinse as follows:** To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

When this container is empty, replace the cap and seal all openings that have been opened during use; return the container to the point of purchase or to a designated location. This container must only be refilled with a pesticide product. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. Check for leaks after refilling and before transport. **DO NOT** transport if this container is damaged or leaking. If the container is damaged, or leaking, or obsolete and not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling, if available, or dispose of container in compliance with state and local regulations.

**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**

**Integrity™ herbicide** is a selective residual preemergence herbicide for controlling most annual grasses, broadleaf weeds, and sedges in field corn, popcorn, sweet corn, and grain sorghum (refer to **Table 1** for a list of weeds controlled preemergence). Residual preemergence applications of **Integrity** must be activated by at least 1/2 inch of rainfall or sprinkler irrigation prior to weed seedling emergence. When **Integrity** is not activated, a labeled postemergence herbicide or cultivation may be needed to control weed escapes.

**Integrity** also provides contact burndown of many broadleaf weeds (refer to **Table 2** for a list of weeds controlled by a burndown application). An adjuvant (refer to **Additives** section for details) is required with **Integrity** for optimum broadleaf burndown activity. Burndown applications of **Integrity** should be made when broadleaf weeds are small and actively growing. 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 a higher application rate within an application rate range and/or higher spray volumes. Angling nozzles forward (to 45 degrees) may improve penetration of denser weed canopies.

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**Table 1. Weeds Controlled by a Residual Preemergence Application of Integrity™ herbicide**

<b>Common Name</b>	<b>Scientific Name</b>	<b>C = Control S = Suppression<sup>1</sup></b>
<b>Annual Broadleaf Weeds</b>		
Amaranth, Palmer	<i>Amaranthus palmeri</i>	C
Amaranth, Powell	<i>Amaranthus powellii</i>	C
Beggarweed, Florida	<i>Desmodium tortuosum</i>	C
Buckwheat, wild	<i>Polygonum convolvulus</i>	C
Buffalobur	<i>Solanum rostratum</i>	C
Burcucumber	<i>Sicyos angulatus</i>	S
Carpetweed	<i>Mollugo verticillata</i>	C
Chamomile, mayweed	<i>Anthemis cotula</i>	C
Chickweed, common	<i>Stellaria media</i>	C
Cocklebur, common	<i>Xanthium strumarium</i>	C
Copperleaf, Virginia	<i>Acalypha virginica</i>	C
Devil's-claw	<i>Proboscidea louisiana</i>	S
Eclipta	<i>Eclipta prostrata</i>	S
Fleabane, hairy	<i>Conyza bonariensis</i>	C
Galinsoga, smallflower	<i>Galinsoga parviflora</i>	C
Groundcherry, cutleaf	<i>Physalis angulata</i>	C
Horseweed (marestail)	<i>Conyza canadensis</i>	C
Jimsonweed	<i>Datura stramonium</i>	C
Kochia	<i>Kochia scoparia</i>	C
Ladysthumb	<i>Polygonum persicaria</i>	C
Lambsquarters, common	<i>Chenopodium album</i>	C
Mallow, Venice	<i>Hibiscus trionum</i>	C
Marestail (horseweed)	<i>Conyza canadensis</i>	C
Morningglory, entireleaf	<i>Ipomoea hederacea</i> var. <i>integriuscula</i>	C
Morningglory, ivyleaf	<i>Ipomoea hederacea</i>	C
Morningglory, palmleaf	<i>Ipomoea wrightii</i>	C
Morningglory, pitted	<i>Ipomoea lacunosa</i>	C
Morningglory, tall	<i>Ipomoea purpurea</i>	C
Mustard, wild	<i>Sinapis arvensis</i>	C
Nightshade, black	<i>Solanum nigrum</i>	C
Nightshade, cutleaf	<i>Solanum triflorum</i>	C
Nightshade, Eastern black	<i>Solanum ptycanthum</i>	C
Nightshade, hairy	<i>Solanum sarrachoides</i>	C
Pennycress, field	<i>Thlaspi arvense</i>	C
Pigweed, prostrate	<i>Amaranthus blitoides</i>	C
Pigweed, redroot	<i>Amaranthus retroflexus</i>	C
Pigweed, smooth	<i>Amaranthus hybridus</i>	C
Pigweed, tumble	<i>Amaranthus albus</i>	C
Puncturevine	<i>Tribulus terrestris</i>	S
Purslane, common	<i>Portulaca oleracea</i>	C
Pusley, Florida	<i>Richardia scabra</i>	C
Ragweed, common	<i>Ambrosia artemisiifolia</i>	C
Ragweed, giant	<i>Ambrosia trifida</i>	C



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**Table 1. Weeds Controlled by a Residual Preemergence Application of Integrity™ herbicide (continued)**

Common Name	Scientific Name	C = Control S = Suppression <sup>1</sup>
<b>Annual Broadleaf Weeds (continued)</b>		
Sida, prickly	<i>Sida spinosa</i>	C
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>	C
Sowthistle, annual	<i>Sonchus arvensis</i>	C
Spurge, nodding	<i>Chamaesyce nutans</i>	C
Spurge, spotted	<i>Chamaesyce maculata</i>	C
Starbur, bristly	<i>Acanthospermum hispidum</i>	C
Sunflower, common	<i>Helianthus annuus</i>	C
Thistle, Russian	<i>Salsola kali</i>	C
Velvetleaf	<i>Abutilon theophrasti</i>	C
Waterhemp	<i>Amaranthus tuberculatus</i>	C
<b>Annual Grasses</b>		
Barnyardgrass	<i>Echinochloa crus-galli</i>	C
Bluegrass, annual	<i>Poa annua</i>	C
Bluegrass, roughstalk	<i>Poa trivialis</i>	C
Brome, California	<i>Bromus carinatus</i>	C
Brome, downy	<i>Bromus tectorum</i>	C
Crabgrass, large	<i>Digitaria sanguinalis</i>	C
Crabgrass, smooth	<i>Digitaria ischaemum</i>	C
Cupgrass, Southwestern	<i>Eriochloa gracilis</i>	C
Cupgrass, woolly	<i>Eriochloa villosa</i>	S
Fescue, rattail	<i>Vulpia myuros</i>	C
Foxtail, giant	<i>Setaria faberi</i>	C
Foxtail, green	<i>Setaria viridis</i>	C
Foxtail, yellow	<i>Setaria pumila</i>	C
Goosegrass	<i>Eleusine indica</i>	C
Johnsongrass (seedling)	<i>Sorghum halepense</i>	S
Millet, wild proso	<i>Panicum miliaceum</i>	S
Panicum, fall	<i>Panicum dichotomiflorum</i>	C
Panicum, Texas	<i>Panicum texanum</i>	S
Rice, red	<i>Oryza sativa</i>	C
Ryegrass, Italian	<i>Lolium multiflorum</i>	C
Sandbur	<i>Cenchrus</i> spp.	S
Shattercane	<i>Sorghum bicolor</i>	S
Signalgrass, broadleaf	<i>Brachiaria platyphylla</i>	S
Witchgrass	<i>Panicum capillare</i>	C
<b>Sedges</b>		
Flatsedge, rice	<i>Cyperus iria</i>	C
Nutsedge, yellow	<i>Cyperus esculentus</i>	S

<sup>1</sup>To complement control, **Integrity** should be used in tank mixes or sequential applications with other labeled herbicides that provide additional control of noted weeds.

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**Table 2. Broadleaf Weeds Controlled by a Burndown Application of Integrity™ herbicide**

<b>Common Name</b>	<b>Scientific Name</b>	<b>C = Control S = Suppression</b>	<b>Maximum Height or Diameter (inches)</b>
Amaranth, Palmer	<i>Amaranthus palmeri</i>	C	6
Bedstraw, catchweed	<i>Galium aparine</i>	C	3
Beggarticks, hairy	<i>Bidens pilosa</i>	C	6
Beggarweed, Florida	<i>Desmodium tortuosum</i>	C	6
Bindweed, field	<i>Convolvulus arvensis</i>	S <sup>1</sup>	6
Buckwheat, wild	<i>Polygonum convolvulus</i>	C	3
Canola, volunteer (rapeseed)	<i>Brassica</i> spp.	C	6
Carpetweed	<i>Mollugo verticillata</i>	C	6
Chickweed, common	<i>Stellaria media</i>	S	3
Cocklebur, common	<i>Xanthium strumarium</i>	C	6
Cowcockle	<i>Vaccaria pyramidata</i>	C	4
Dandelion	<i>Taraxacum officinale</i>	S <sup>1</sup>	6
Eveningprimrose, cutleaf	<i>Oenothera laciniata</i>	C	4
Falseflax, smallseed	<i>Camelina microcarpa</i>	C	4
Filaree, broadleaf	<i>Erodium botrys</i>	C	4
Filaree, redstem	<i>Erodium cicutarium</i>	S	3
Filaree, whitestem	<i>Erodium moschatum</i>	C	4
Fleabane, hairy	<i>Conyza bonariensis</i>	C	6
Flixweed	<i>Descurainia sophia</i>	C	6
Goosefoot, nettleleaf	<i>Chenopodium murale</i>	C	3
Groundcherry, cutleaf	<i>Physalis angulata</i>	C	6
Groundsel, common	<i>Senecio vulgaris</i>	C	4
Henbit	<i>Lamium amplexicaule</i>	S	3
Horseweed (marestalk)	<i>Conyza canadensis</i>	C	6
Knotweed, prostrate	<i>Polygonum aviculare</i>	C	3
Kochia	<i>Kochia scoparia</i>	C	3
Ladysthumb	<i>Polygonum persicaria</i>	C	6
Lambsquarters, common	<i>Chenopodium album</i>	C	6
Lambsquarters, narrowleaf	<i>Chenopodium pratericola</i>	C	6
Lettuce, miner's	<i>Claytonia perfoliata</i>	C	6
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>	C	6
Marestalk (horseweed)	<i>Conyza canadensis</i>	C	6
Morningglory, entireleaf	<i>Ipomoea hederacea</i> var. <i>integriuscula</i>	C	6
Morningglory, ivyleaf	<i>Ipomoea hederacea</i>	C	6
Morningglory, pitted	<i>Ipomoea lacunosa</i>	C	6
Morningglory, tall	<i>Ipomoea purpurea</i>	C	6
Mustard, black	<i>Brassica nigra</i>	C	6
Mustard, tumble	<i>Sisymbrium altissimum</i>	C	6
Mustard, wild	<i>Sinapis arvensis</i>	C	6
Nettle, burning	<i>Urtica urens</i>	C	4

**Table 2. Broadleaf Weeds Controlled by a Burndown Application of Integrity™ herbicide** (continued)

Common Name	Scientific Name	C = Control S = Suppression	Maximum Height or Diameter (inches)
Nightshade, black	<i>Solanum nigrum</i>	C	6
Nightshade, cutleaf	<i>Solanum triflorum</i>	C	6
Nightshade, Eastern black	<i>Solanum ptycanthum</i>	C	6
Nightshade, hairy	<i>Solanum saccharoides</i>	C	6
Pennycress, field	<i>Thlaspi arvense</i>	C	6
Pigweed, prostrate	<i>Amaranthus blitoides</i>	C	6
Pigweed, redroot	<i>Amaranthus retroflexus</i>	C	6
Pigweed, smooth	<i>Amaranthus hybridus</i>	C	6
Puncturevine	<i>Tribulus terrestris</i>	C	6
Purslane, common	<i>Portulaca oleracea</i>	C	3
Pusley, Florida	<i>Richardia scabra</i>	S	3
Ragweed, common <sup>2</sup>	<i>Ambrosia artemisiifolia</i>	C	6
Ragweed, giant	<i>Ambrosia trifida</i>	C	6
Rocket, London	<i>Sisymbrium irio</i>	C	6
Sesbania, hemp	<i>Sesbania exaltata</i>	C	4
Shepherd's-purse	<i>Capsella bursa-pastoris</i>	C	6
Sida, prickly	<i>Sida spinosa</i>	C	6
Smartweed, Pennsylvania	<i>Polygonum pensylvanicum</i>	C	6
Sowthistle, annual	<i>Sonchus oleraceus</i>	C	6
Sowthistle, spiny	<i>Sonchus asper</i>	C	6
Spurge, garden	<i>Chamaesyce hirta</i>	C	6
Spurge, prostrate	<i>Chamaesyce humistrata</i>	C	6
Spurge, spotted	<i>Chamaesyce maculata</i>	C	6
Sunflower, common	<i>Helianthus annuus</i>	C	6
Tansymustard, green	<i>Descurainia incana</i>	C	6
Tansymustard, pinnate	<i>Descurainia pinnata</i>	C	6
Thistle, Canada	<i>Cirsium arvense</i>	S <sup>1</sup>	6
Thistle, Russian	<i>Salsola kali</i>	C	3
Velvetleaf	<i>Abutilon theophrasti</i>	C	6
Waterhemp <sup>2</sup>	<i>Amaranthus tuberculatus</i>	C	6
Willowweed	<i>Epilobium adenocaulon</i>	C	3

<sup>1</sup> Control of seedling stage and suppression of perennial growth stage.

<sup>2</sup> Populations of noted weeds exist that are known to be resistant to burndown applications of **Group 14/Group E** herbicides and will not be controlled by herbicides like **Integrity**. 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).

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## Mode of Action

**Integrity™ herbicide** combines the two active ingredients: saflufenacil, a potent inhibitor of protoporphyrinogen-oxidase belonging to herbicide mode-of-action **Group 14 (WSSA)/Group E (HRAC)**, and dimethenamid-P, a chloroacetamide belonging to the herbicide mode-of-action **Group 15/Group K<sub>3</sub>**. Saflufenacil is rapidly absorbed by roots and foliage. Following inhibition of the protoporphyrinogen-oxidase, plant death is the result of membrane damage. Under active growing conditions, susceptible emerging weed seedlings usually develop chlorotic and necrotic injury symptoms within hours and die within a few days. Susceptible germinating weed seeds will usually die as they reach the soil surface or shortly after emergence. Dimethenamid-P is a root-and-shoot inhibitor that controls susceptible weed seedlings before or soon after they emerge from the soil.

## Resistance Management

While weed resistance to protoporphyrinogen-oxidase inhibiting herbicides is relatively infrequent, populations of resistant biotypes are known to exist. Resistance management practices include:

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

## Crop Tolerance

Field corn, popcorn, sweet corn, and grain sorghum are tolerant to **Integrity** 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. low soil fertility, seedling disease, extreme hot or cold weather, excessive moisture, high soil pH, high soil salt concentration, or drought).

Severe crop injury will result if **Integrity** is applied post-emergence (over the top) to corn or sorghum.

## Application Instructions

**Integrity** may be applied preplant surface, preplant incorporated or preemergence to field corn, popcorn, sweet corn, and grain sorghum. **Integrity** may only be applied prior to crop emergence.

## Application Rates

Application rates of **Integrity** for residual preemergence weed control may vary depending on soil texture and organic matter. Refer to **Table 3** for soil texture groups used in this label.

**Table 3. Soil Texture Groups**

Coarse	Medium	Fine
Sand	Silt	Sandy clay
Loamy sand	Silt loam	Silty clay
Sandy loam	Loam	Silty clay loam
	Sandy clay loam	Clay loam
		Clay

An overview of application rates for **Integrity** by crop use is provided in the **Integrity Application Rates** chart. Refer to the **Crop-specific Information** section for specific application directions and the restrictions and limitations by crop and use pattern.

**Integrity Application Rates**

Crop and/or Use	Application Timing and Single Application Rate (fl ozs/A)		Maximum Single or Maximum Cumulative Application Rate per Cropping Season**	
	Burndown* (includes early preplant applications)	Burndown* + Residual (includes early preplant, preplant incorporated, and preemergence applications)	Integrity (fl ozs/A)	Integrity Active Ingredients (lb ai/A)
Corn	5 to 10	10 to 25	25	0.11 (saflufenacil) 0.98 (dimethenamid-P)
Fallow	5 to 10	10 to 25	25	0.11 (saflufenacil) 0.98 (dimethenamid-P)
Sorghum	5 to 10	10 to 25	25	0.11 (saflufenacil) 0.98 (dimethenamid-P)

\* Best product performance in a contact burndown use pattern is obtained when **Integrity** is applied with a suitable adjuvant system to actively growing weeds (refer to **Additives** section for details).

\*\* A cropping season is defined as the period following harvest of the preceding crop through harvest of the planned or current crop.

**NOTE: Integrity** must be applied before crop emergence (see **Crop-specific Information** section for application timing details).

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## Application Methods and Equipment

**Integrity™ herbicide** 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.

**Integrity** may be applied using either water or sprayable fluid nitrogen fertilizer solutions as the spray carrier. Additionally, **Integrity** may be impregnated on and applied with dry bulk fertilizer.

## 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:

1. The distance of the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or 90% of rotor.
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, applications 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 inversions.
6. Avoid potential adverse effects to nontarget areas by maintaining a (120)<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).

<sup>a</sup>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.

Integrity Use Rate (fl ozs/A)	Saflufenacil Use Rate (lb ai/A)	Saflufenacil Use Rate (g ai/ha)	Buffer Zone Distance (feet)
5	0.011	13	20
10	0.022	25	26
12	0.045	50	66
13	0.060	63	80
15	0.070	75	100
17	0.076	85	100
18	0.080	94	100
20	0.089	100	100
25	0.111	125	120

## Ground Application Requirements

**Spray Carrier Volume.** Use 3 or more gallons of water per acre or 20 or more gallons of sprayable fluid fertilizer 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.
3. Avoid potential adverse effects to nontarget areas by maintaining a (60)<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).

<sup>a</sup>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.

Integrity™ herbicide Use Rate (fl ozs/A)	Saflufenacil Use Rate (lb ai/A)	Saflufenacil Use Rate (g ai/ha)	Buffer Zone Distance (feet)
5	0.011	13	10
10	0.022	25	13
12	0.045	50	33
13	0.060	63	40
15	0.070	75	50
17	0.076	85	50
18	0.080	94	50
20	0.089	100	50
25	0.111	125	60

### Ground Application (dry bulk fertilizer)

**Integrity** may be impregnated or coated onto dry bulk granular fertilizer carriers for residual soil surface applications. Impregnation or coating may be conducted by either in-plant bulk or on-board systems. Perform the mixing operation in well-ventilated areas.

Addition of a drying agent may be necessary if the fertilizer and herbicide blend is too wet for uniform application because of high humidity, high urea concentration, or low fertilizer use rate. Slowly add the drying agent to the blend until a flowable mixture is obtained. Drying agents are not recommended for use with on-board impregnation systems.

Under some conditions, fertilizer impregnated with **Integrity** may clog air tubes or deflector plates on pneumatic application systems. Mineral oil may be added to **Integrity** before blending with fertilizer to reduce plugging. **DO NOT** use drying agents when mineral oil is used. To avoid separation of **Integrity** and mineral oil mixes in cold temperatures, either keep mixture heated or agitated prior to blending with fertilizer. Mineral oil may be used at in-plant blending stations or on-board injection systems.

Generally fertilizer application rates of at least 200 lbs to 700 lbs per acre of herbicide and fertilizer blend will provide adequate distribution or coverage for **Integrity** across the soil surface. Application must be made uniformly to the soil to prevent possible crop injury and offer satisfactory weed control. Impregnated fertilizer spread at 1/2 rate and overlapped to obtain a full rate will offer a more uniform distribution. A shallow (< 2 inches) incorporation is desirable for improved weed control. Deeper incorporation will dilute the herbicide layer near the soil surface and may result in unsatisfactory weed control.

Use the following formula to determine the herbicide rate when using dry bulk fertilizer applications:

$$\frac{\text{fl ozs herbicide per acre}}{\text{pounds fertilizer per acre}} \times 2000 = \frac{\text{fl ozs herbicide}}{\text{per ton of fertilizer}}$$

### Chemigation Applications via Sprinkler Irrigation Systems

**Integrity** may be applied as a chemigation treatment through sprinkler irrigation systems. Apply this product **ONLY** through a sprinkler irrigation system of the following type: center pivot, lateral move, end tow or side (wheel) roll.

**DO NOT apply this product through any other type of sprinkler irrigation system.**

Uniform distribution of **Integrity**-treated irrigation water is the sole responsibility of the applicator and is required to avoid crop injury, lack of herbicide effectiveness, or illegal pesticide residues in the crop. If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.

Proper calibration is the responsibility of the applicator. The system must be properly calibrated (with water only) to ensure that the amount of **Integrity** applied corresponds to the recommended rate. Apply **Integrity** in 1/2 to 3/4 inch of water during the first sprinkler set (use at least 1 inch of water in the states of **New Mexico, Oklahoma and Texas**). BASF recommends that **Integrity** is mixed with water at a 1:1 ratio in the injection nurse tank to assist with product flowability. Maintain agitation in the injection nurse tank to keep a uniform herbicide suspension during application. When application is complete, flush the system with water.

#### Special precautions for chemigation:

- DO NOT** apply when wind speed favors drift beyond the area intended for treatment.
- DO NOT** connect an irrigation system used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place.
- A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
- Tail water (runoff water) from chemigation that contains **Integrity** should be recirculated and/or contained in the field in a cistern or holding reservoir from the initial application and/or used only on adjacent, approved crops for which **Integrity** is registered for this type of application.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. It must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The sprinkler chemigation system must contain a functional check valve, vacuum-relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water-source contamination from backflow. In addition, systems must use a metering pump, such as a

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positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

- 7. The sprinkler-chemigation system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 8. The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

**Chemigation systems connected to public water systems:**

- 1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- 2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- 3. All chemigation systems connected to public water systems must also follow restrictions listed in the preceding section.

**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
- 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 **Integrity™ herbicide**, an adjuvant system must be used that includes the following:

Adjuvant	Rate
Methylated seed oil (MSO) <b>or</b> Crop oil concentrate (COC)	1 gal/100 gals (1% v/v)
<b>PLUS</b>	<b>PLUS</b>
Ammonium sulfate (AMS) <b>or</b> Urea ammonium nitrate (UAN)	8.5 to 17 lbs/100 gals (1% to 2% w/v) <b>or</b> 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 **Integrity™ herbicide** 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.

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### General Tank Mixing Information

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**Integrity** 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 the **Crop-specific Information** for tank mixing details.

### 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 the **Mixing Order** section using 2 teaspoons for each pound or 1 teaspoon for each pint of labeled use 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.

5. **Water-dispersible products** (such as dry flowables, wettable powders, suspension concentrates, or suspensions)
6. **Water-soluble products**
7. **Emulsifiable concentrates** (including crop oil concentrate or methylated seed oil adjuvants)
8. **Water-soluble additives** (including dry and liquid fertilizers such as ammonium sulfate or urea ammonium nitrate)
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.

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### Use Precautions

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- **Maximum seasonal use rate - DO NOT** apply more than a maximum cumulative amount of 25 fl ozs/A of **Integrity** per cropping season. A cropping season is defined as the period following harvest of the preceding crop through the harvest of the planned or current crop.
- If additional saflufenacil is applied, **DO NOT** exceed a maximum cumulative amount of 0.134 lb ai/A saflufenacil per cropping season.
- If additional dimethenamid-P is applied, **DO NOT** exceed a maximum cumulative amount of 0.98 lb ai/A dimethenamid-P per cropping season.
- **DO NOT** apply **Integrity** after crop emergence because severe crop injury will occur.
- **DO NOT** apply **Integrity** where an at-planting application of organophosphate or carbamate insecticide(s) is planned and/or has occurred because severe injury may result.
- **Rainfastness - Integrity** 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.
- **Integrity is not for sale, distribution, or use in Nassau and Suffolk counties in New York State.**

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### Crop Rotation and Emergency Replanting Intervals

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- Fall-seeded cereal crops may be planted 4 months or more following treatment.
- There are no rotational crop restrictions the spring following the previous year's application of **Integrity**.
- Field corn, popcorn, sweet corn, and grain sorghum (according to application rates in **Crop-specific Information**) may be replanted immediately after crop failure (because of environmental factors, such as drought, frost, hail, etc.).



- Be sure to determine the rotational crop interval for tank mix products and follow the most restrictive interval of all products applied.

### Crop-specific Information

This section provides directions for **Integrity™ herbicide** in specific crops. Be sure to read 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, **Integrity** may be applied for residual control of germinating weed seedlings before planting (preplant) or after planting but before crop emergence (preemergence) (refer to **Table 1** for list of weeds controlled) or burndown control of emerged broadleaf weeds (refer to **Table 2** for list of weeds controlled).

### Field corn (grain, seed, silage), popcorn, and sweet corn

**Integrity** may be applied preplant surface, preplant incorporated, or preemergence to corn. Corn in this label refers to field corn (grown for grain, silage, or seed), popcorn, and sweet corn (not including sweet corn grown for seed). Before applying **Integrity** to seed corn, sweet corn, or popcorn, verify the selectivity of **Integrity** on your inbred line or hybrid with your local seed company (supplier) to help avoid potential injury to sensitive inbreds or hybrids.

### Application Rate

**Integrity** can be applied as part of a one-pass or planned sequential (two-pass) weed control program. A one-pass weed control program should be used where no cultivation or postemergence herbicide application is anticipated. One-pass application rates for **Integrity** when applied alone, in tank mix, or sequentially are provided in **Table 4** for field corn and **Table 5** for popcorn and sweet corn.

**Table 4. Residual Preemergence Rates of Integrity in Field Corn**

Rate by Soil Texture and Organic Matter Content (fl ozs/A)		
Soil Texture <sup>1</sup>	Organic Matter	
	≤ 1.5%	> 1.5%
Coarse <sup>2</sup>	12	13
Medium	18	20
Fine	20	25

<sup>1</sup>Refer to **Table 3** for definitions of soil texture groups.

<sup>2</sup>Use on coarse soils with less than 1.5% organic matter may result in crop injury.

**Table 5. Residual Preemergence Rates of Integrity in Popcorn and Sweet Corn**

Rate by Soil Texture and Organic Matter Content (fl ozs/A)		
Soil Texture <sup>1</sup>	Organic Matter	
	≤ 1.5%	> 1.5%
Coarse	DO NOT USE	10
Medium	13	15
Fine	15	20

<sup>1</sup>Refer to **Table 3** for definitions of soil texture groups.

**Integrity** use rates applied as the residual component of a planned sequential (two-pass) program (see **Table 6**) will provide control or suppression of listed weeds (**Table 1**) through early to mid season. For full season weed control, apply a labeled postemergence treatment such as **Status® herbicide** + glyphosate as the sequential component.

**Table 6. Residual Preemergence Rates of Integrity in a Planned Sequential Program<sup>1</sup> in Field Corn**

Soil Texture <sup>2</sup>	Rate by Soil Texture (fl ozs/A)
Coarse	10
Medium	13
Fine	17

<sup>1</sup>Application rates in **Table 6** will eliminate early season weed interference until cultivation or a labeled postemergence herbicide is applied.

However, application rates in **Table 4** should be applied if **Integrity** is being used to control weeds resistant to another herbicide in the tank mix or sequential weed control program.

<sup>2</sup>Refer to **Table 3** for definitions of soil texture groups.

### Application Timing

#### Early Preplant Surface Application (15 to 30 days prior to planting)

Application rates in **Table 4** should be used when making early preplant surface applications, using the highest application rate for a given soil texture. Early preplant surface applications are not recommended on coarse soils, in areas where average annual rainfall (or rainfall + irrigation) typically exceeds 40 inches, or for popcorn or sweet corn. Cultivation or a labeled postemergence herbicide application may still be required under certain conditions for complete weed control.

Early preplant surface applications may be applied as part of a split application program where applications are made as part of the application timings described in this label. However, the cumulative total of sequential application rates must not exceed the maximum labeled rate for a given soil texture.

## Preplant Surface and Preplant Incorporated Applications (up to 14 days prior to planting)

**Integrity™ herbicide** can be applied at use rates specified in **Table 4**, **Table 5**, or **Table 6** to the soil surface or incorporated up to 14 days before planting on all soil types. For preplant incorporated applications, apply **Integrity** and incorporate into the upper soil surface (1 to 2 inches). Use a harrow, rolling cultivator, field cultivator, or other implement capable of providing uniform shallow incorporation. Avoid deeper incorporation or reduced weed control may result.

### Preemergence Surface Application

Apply **Integrity** at use rates specified in **Table 4**, **Table 5**, or **Table 6** as a broadcast treatment to the soil surface after planting and before crop emergence. **Integrity** must be applied before crop emergence or injury will occur.

### Burndown Plus Residual Weed Control

In addition to residual weed control obtained at any of the application timings described above, **Integrity** will also provide burndown of emerged broadleaf weeds listed in **Table 2**. An adjuvant system (refer to **Additives** section for details) is required for optimum burndown activity. Burndown control of emerged grasses or additional broadleaf weeds not listed on the label will require a tank mix with another herbicide (such as glyphosate).

Residual preemergence application rates of **Integrity** can follow a burndown application of **Sharpen™ herbicide** (at 1.0 fl oz/A); however, **DO NOT** exceed the cropping seasonal maximum cumulative amount of saflufenacil per acre from all product sources.

### Crop-specific Restrictions and Limitations

- **DO NOT** apply **Integrity** after corn emergence or severe crop injury will occur.
- **DO NOT** apply **Integrity** where an at-planting application of an organophosphate or carbamate insecticide(s) is planned and/or has occurred because severe injury may result.
- **DO NOT** apply more than a maximum cumulative amount of 25 fl ozs/A of **Integrity** per cropping season.
- Corn, popcorn, or sweet corn forage and silage can be harvested, fed, or grazed 80 or more days after application.

### Tank Mixtures

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

- **Sharpen**
- **Status® herbicide**
- **Clarity® herbicide**
- atrazine
- glyphosate (e.g. **Roundup® herbicide**)

**NOTE:** Refer to the tank mix product labels to confirm that the respective tank mix products are registered for use on specific corn types; not all corn products are registered for use on seed corn, popcorn, and sweet corn.

### Fallow

**Integrity** may be used as a burndown treatment to control broadleaf weeds at any time of the year during the fallow period following crop harvest and before the following crop is planted.

### Application Rates and Timings

Apply **Integrity** as a broadcast burndown spray at 5.0 to 10.0 fl ozs/A plus recommended adjuvants (refer to **Additives** section for details). Best product performance is obtained when broadleaf weeds are small and actively growing (refer to **Table 2** for list of weeds controlled). Thorough coverage of existing weeds is essential and higher spray volumes may be needed for best performance.

Sequential applications may be made with a minimum of 14 days between applications; **DO NOT** exceed a maximum seasonal cumulative amount of 25 fl ozs/A of **Integrity** per cropping season.

For residual weed control, **Integrity** may be applied at 10 to 25 fl ozs/A.

Specific rotational crop intervals must be observed between an application of **Integrity** and planting of the following crop (see **Crop Rotation and Emergency Replanting Intervals** section for crop rotation restrictions).

### Tank Mixtures

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

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

### Grain Sorghum

**Integrity** may be applied preplant surface, preplant incorporated, or preemergence to grain sorghum. All **Integrity** applications must only be made to sorghum seed that has been properly treated by the seed company with an approved chloroacetamide herbicide safener or severe injury may occur.

Under high soil moisture and/or cool conditions, **Integrity** application may cause temporary stunting or leaf wrapping of grain sorghum. Grain sorghum will normally outgrow these symptoms within 10 to 14 days.

### Application Rate

Application rates for **Integrity** when applied alone, in tank mix, or sequentially are provided in **Table 7**.

**Table 7. Residual Preemergence Rates of Integrity™ herbicide in Grain Sorghum**

Rate by Soil Texture and Organic Matter Content (fl ozs/A)		
Soil Texture <sup>1</sup>	Organic Matter	
	≤ 1.5%	> 1.5%
Coarse	DO NOT USE	10
Medium	13	15
Fine	15	20

<sup>1</sup>Refer to **Table 3** for definitions of soil texture groups.

### Application Timings

#### Early Preplant Surface Application (15 to 30 days prior to planting)

Application rates in **Table 7** should be used when making early preplant surface applications, using the highest application rate for a given soil texture. Early preplant surface applications are not recommended on coarse soils, in areas where average annual rainfall (or rainfall + irrigation) typically exceeds 40 inches, or for popcorn or sweet corn. Cultivation or a labeled postemergence herbicide application may still be required under certain conditions for complete weed control.

Early preplant surface applications may be applied as part of a split application program where applications are made as part of the application timings described in this label. However, the cumulative total of sequential application rates must not exceed the maximum labeled rate for a given soil texture.

#### Preplant Surface and Preplant Incorporated Applications (up to 14 days prior to planting)

**Integrity** can be applied at use rates specified in **Table 7** to the soil surface or incorporated up to 14 days before planting on all soil types. For preplant incorporated applications, apply **Integrity** and incorporate into the upper soil surface (1 to 2 inches). Use a harrow, rolling cultivator, field cultivator, or other implement capable of providing uniform shallow incorporation. Avoid deeper incorporation or reduced weed control may result.

#### Preemergence Surface Application

Apply **Integrity** at use rates specified in **Table 7** as a broadcast treatment to the soil surface after planting and before crop emergence. **Integrity** must be applied before crop emergence or injury will occur.

#### Burndown Plus Residual Weed Control

In addition to residual weed control obtained at any of the application timings described above, **Integrity** will also provide burndown of emerged broadleaf weeds listed in **Table 2**. An adjuvant system (refer to **Additives** section for details) is required for optimum burndown activity. Burndown control of emerged grasses or additional

broadleaf weeds not listed on the label will require a tank mix with another herbicide (such as glyphosate).

Residual preemergence application rates of **Integrity** can follow a burndown application of **Sharpen™ herbicide** (at 1.0 fl oz/A); however, **DO NOT** exceed the cropping seasonal maximum cumulative amount of saflufenacil per acre from all product sources.

### Crop-specific Restrictions and Limitations

- **DO NOT** apply **Integrity** after grain sorghum emergence or severe crop injury will occur.
- **DO NOT** apply **Integrity** where an at-planting application of an organophosphate or carbamate insecticide(s) is planned and/or has occurred or severe injury may result.
- **DO NOT** apply more than a maximum cumulative amount of 25 fl ozs/A of **Integrity** per cropping season.
- **Integrity** is not registered for use on sweet or forage sorghum.
- Sorghum forage and silage can be harvested, fed, or grazed 70 or more days after application.

### Tank Mixtures

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

- **Sharpen**
- **Clarity® herbicide** (preplant only)
- atrazine
- glyphosate (e.g. **Roundup® herbicide**)

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### 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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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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