

# Powered by **Kixor®** Herbicide

For conifer control, vegetation control and management in noncropland and industrial landscaping areas, and postemergence and residual weed control in pasture and rangeland

#### **Active Ingredient\*:**

EPA Reg. No. 7969-297

EPA Est. No.

# 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 **Precautionary Statements**, **Directions For Use**, **Conditions of Sale and Warranty**, and state-specific 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:**



<sup>\*</sup> Contains 2.85 pounds active ingredient saflufenacil per gallon formulated as a water-based suspension concentrate

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

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact BASF Agricultural Solutions US LLC (hereafter "BASF") for emergency medical treatment information: 1-800-832-HELP (4357).

## **Precautionary Statements**

#### **Hazards to Humans and Domestic Animals**

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

## **Personal Protective Equipment (PPE)**

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Waterproof gloves
- Protective eyewear including 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**

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, including a spill or equipment breakdown.

#### **USER SAFETY RECOMMENDATIONS**

#### Users should:

- Wash hands thoroughly 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 including 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.

## **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 1-844-447-3813 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 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 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 **Detail® Powered by Kixor® herbicide**. The use of this product 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.

#### 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, including plants, soil, or water, is:

- Coveralls
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

#### NONAGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

**DO NOT** enter treated areas without protective clothing until sprays have dried.

#### 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. Avoid crosscontamination with other pesticides.

## **Pesticide Disposal**

Wastes resulting from this product must 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 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 and continue to drain for 10 seconds after flow begins to drip. 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 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 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**

**Detail® Powered by Kixor® herbicide** (henceforth in this label referred to as **Detail herbicide**) may be applied in the following use sites:

- Conifer and hardwood plantations
- Industrial landscaping areas
- Nurseries (ornamental facilities)
- Leafy spurge infested areas
- Native grass areas
- Pasture and rangeland
- Noncropland areas in need of vegetation control and management

**Detail herbicide** provides both contact burndown (postemergence) and rate-dependent residual preemergence weed control (refer to **Table 1** and **Table 2** for list of weeds controlled). **Detail herbicide** does not control grass weeds and must be tank mixed with a grass herbicide for a complete weed control program.

Thorough coverage of weed foliage is critical for optimum postemergence control.

Make postemergence applications of **Detail herbicide** in tank mixture with glyphosate-based products when weeds are small (less than 6 inches) and actively growing. An adjuvant is required with **Detail herbicide** for optimum burndown activity (refer to **Additives** section for specifics). 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 weeds, use higher spray volumes and/or a higher application rate within an application rate range.

Length of weed control from residual preemergence applications will be affected by use rate, soil characteristics (texture, organic matter, cation exchange capacity), as well as the amount of rainfall after application.

**Detail herbicide** is rainfast 1 hour after application. Burndown activity may be reduced if rain occurs within 1 hour of application.

Table 1. Weeds Controlled with a Postemergence Application of Detail® herbicide¹

Common Name	Scientific Name	
Amaranth, Palmer	Amaranthus palmeri	
Bedstraw, catchweed	Galium aparine	
Beggarticks, hairy	Bidens pilosa	
Beggarweed, Florida	Desmodium tortuosum	
Bindweed, field <sup>3</sup>	Convolvulus arvensis	
Buckwheat, wild	Polygonum convolvulus	
Carpetweed	Mollugo verticillata	
Chickweed, common <sup>2</sup>	Stellaria media	
Cedar, eastern red	Juniperus virginiana	
Cedar, western red	Thuja plicata	
Cocklebur, common	Xanthium strumarium	
Cowcockle	Vaccaria pyramidata	
Dandelion <sup>3</sup>	Taraxacum officinale	
Eveningprimrose, cutleaf	Oenothera laciniata	
Falseflax, smallseed	Camelina microcarpa	
Filaree, redstem <sup>2</sup>	Erodium cicutarium	
Fir	Abies spp.	
Fleabane, hairy	Conyza bonariensis	
Flixweed	Descurainia sophia	
Groundcherry, cutleaf	Physalis angulata	
Groundsel, common	Senecio vulgaris	
Hawksbeard, narrowleaf <sup>7</sup>	Crepis tectorum	
Hemlock, poison <sup>7</sup>	Conium maculatum	
Henbit <sup>2</sup>	Lamium amplexicaule	
Horseweed (Marestail)	Conyza canadensis	
Juniper (invasive species)	Juniperus spp.	
Knotweed, prostrate	Polygonum aviculare	
Kochia	Kochia scoparia	
Ladysthumb	Polygonum persicaria	
Lambsquarters, common	Chenopodium album	
Lambsquarters, narrowleaf	Chenopodium pratericola	
Lettuce, prickly	Lactuca serriola	
Mallow, common	Malva neglecta	
Mallow, little (Cheeseweed)	Malva parviflora	
Mallow, Venice	Hibiscus trionum	
Marestail (Horseweed)	Conyza canadensis	
Marshelder	Iva xanthifolia	
Morningglory, entireleaf	Ipomoea hederacea var. integriuscula	
Morningglory, ivyleaf	Ipomoea hederacea	
Morningglory, palmleaf	Ipomoea wrightii	
Morningglory, pitted	Ipomoea lacunosa	
Morningglory, tall	Ipomoea purpurea	
Mustard, black	Brassica nigra	
Mustard, tumble	Sisymbrium altissimum	
	(continued	

Table 1. Weeds Controlled with a Postemergence Application of Detail® herbicide¹ (continued)

Application of Detail Herbic	, ide (continued)	
Common Name	Scientific Name	
Mustard, wild	Sinapis arvensis	
Needles, Spanish <sup>7</sup>	Bidens pilosa	
Nettle, burning	Urtica urens	
Nightshade, black	Solanum nigrum	
Nightshade, cutleaf	Solanum triflorum	
Nightshade, Eastern black	Solanum ptycanthum	
Nightshade, hairy	Solanum saccharoides	
Parthenium	Parthenium hysterophorus	
Pennycress, field	Thlaspi arvense	
Pigweed, prostrate	Amaranthus blitoides	
Pigweed, redroot	Amaranthus retroflexus	
Pigweed, smooth	Amaranthus hybridus	
Pine <sup>4</sup>	Pinus spp.	
Pine, loblolly	Pinus taeda	
Pine, longleaf	Pinus palustris	
Pine, shortleaf	Pinus echinata	
Pine, slash	Pinus elliottii	
Pine, Virginia	Pinus virginiana	
Pine, white	Pinus strobus	
Puncturevine	Tribulus terrestris	
Purslane, common	Portulaca oleracea	
Pusley, Florida <sup>2</sup>	Richardia scabra	
Ragweed, common <sup>5</sup>	Ambrosia artemisiifolia	
Ragweed, giant <sup>5</sup>	Ambrosia trifida	
Rapeseed (Canola), volunteer	Brassica spp.	
Rocket, London <sup>7</sup>	Sisymbrium irio	
Sesbania, hemp	Sesbania exaltata	
Shepherd's-purse	Capsella bursa-pastoris	
Sida, prickly	Sida spinosa	
Smartweed, Pennsylvania	Polygonum pensylvanicum	
Sowthistle, annual	Sonchus oleraceus	
Sowthistle, spiny	Sonchus asper	
Spruce	Picea spp.	
Spurge, leafy <sup>6,7</sup>	Euphorbia esula	
Sunflower, common	Helianthus annuus	
Tansymustard, pinnate	Descurainia pinnata	
Texasweed	Caperonia palustris	
Thistle, Canada <sup>3</sup>	Cirsium arvense	
Thistle, Russian	Salsola kali	
Velvetleaf	Abutilon theophrasti	
Waterhemp <sup>5</sup>	Amaranthus tuberculatus	
Willowweed	Epilobium adenocaulon	
<sup>1</sup> For best control, target application wh	· · · · · · · · · · · · · · · · · · ·	

<sup>&</sup>lt;sup>1</sup> For best control, target application when weeds are less than 6 inches. Larger weeds or heavy infestations require higher use rates (see **Table 3**) or tank mixes.

<sup>&</sup>lt;sup>2</sup> Suppression only

<sup>&</sup>lt;sup>3</sup> Control of seedling stage and suppression of perennial growth stage

<sup>4</sup> See **Right of Way**, **Conifer and Hardwood Plantations**, and **Vegetation Control and Management in Noncropland Areas** specific use pattern directions for additional information. Tank mix partners, including glyphosate, are required.

<sup>5</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 **Detail® herbicide**. 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 and mechanical control).

Table 2. Weeds Controlled with a Residual Preemergence Application of Detail herbicide<sup>1</sup>

Common Name	Scientific Name	
Amaranth, Palmer	Amaranthus palmeri	
Amaranth, Powell	Amaranthus powellii	
Beggarweed, Florida	Desmodium tortuosum	
Buckwheat, wild	Polygonum convolvulus	
Burcucumber <sup>2</sup>	Sicyos angulatos	
Canola, volunteer (Rapeseed), all types <sup>3</sup>	Brassica spp.	
Carpetweed	Mullugo verticillata	
Chickweed, common	Stellaria media	
Cocklebur, common	Xanthium strumarium	
Copperleaf, Virginia	Acalypha virginica	
Galinsoga, smallflower	Galinsoga parviflora	
Groundcherry, cutleaf	Physalis angulata	
Horseweed (Marestail)	Conyza canadensis	
Jimsonweed	Datura stramonium	
Kochia	Kochia scoparia	
Ladysthumb	Polygonum persicaria	
Lambsquarters, common	Chenopodium album	
Mallow, Venice	Hibiscus trionum	
Marestail (Horseweed)	Conyza canadensis	
Morningglory, entireleaf	lpomoea hederacea var. integriuscula	
Morningglory, ivyleaf	Ipomoea hederacea	
Morningglory, pitted	Ipomoea lacunosa	
Morningglory, tall	Ipomoea purpurea	
Mustard, wild	Sinapis arvensis	
Nightshade, black	Solanum nigrum	
Pennycress, field	Thlaspi arvense	
Pigweed, prostrate	Amaranthus blitoides	
Pigweed, redroot	Amaranthus retroflexus	
Pigweed, smooth	Amaranthus hybridus	
Pigweed, tumble	Amaranthus albus	
Puncturevine <sup>2</sup>	Tribulus terrestris	
Purslane, common	Portulaca oleracea	
Pusley, Florida <sup>2</sup>	Richardia scabra	
Ragweed, common	Ambrosia artemisiifolia	
Ragweed, giant	Ambrosia trifida	
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Table 2. Weeds Controlled with a Residual Preemergence Application of Detail herbicide<sup>1</sup> (continued)

Common Name	Scientific Name
Sida, prickly	Sida spinosa
Smartweed, Pennsylvania	Polygonum pensylvanicum
Starbur, bristly	Acanthospermum hispidum
Sunflower, common	Helianthus annuus
Texasweed	Caperonia palustris
Thistle, Russian	Salsola kali
Velvetleaf	Abutilon theophrasti
Waterhemp	Amaranthus tuberculatus

<sup>&</sup>lt;sup>1</sup> For effective **residual** preemergence weed control from postemergence applications, **Detail herbicide** must be used at the maximum use rate of 6 fl ozs/A (see **Table 3**) and be activated by a minimum of 1/2 inch of rainfall before weed seedling emergence. When **Detail herbicide** is not activated, a labeled postemergence herbicide may be required to improve weed control.

#### **Mode of Action**

Detail herbicide is a potent inhibitor of protoporphyrinogen-oxidase belonging to herbicide mode-of-action **Group 14** (WSSA)/**Group E** (HRAC). Detail herbicide is rapidly absorbed by roots and foliage. Following inhibition of protoporphyrinogen-oxidase, plant death is the result of membrane damage. 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.

## **Herbicide Resistance Management**

While weed resistance to **Group 14/E** herbicides are relatively infrequent, populations of resistant biotypes are known to exist. The frequency of resistant biotypes may increase if **Group 14/E** herbicides are used repeatedly in the same field or in successive years as the primary control of the targeted species. If resistant biotypes dominate the weed population, it may result in partial or total loss of control by other **Group 14/E** herbicides. Weeds resistant to **Group 14/E** herbicides may be effectively managed using herbicide(s) from a different group.

To aid in the prevention of developing resistant weeds, the following herbicide resistance management principles should be followed where practical:

- Resistance management should be part of a diversified weed control strategy that integrates chemical, cultural, and mechanical control tactics. Start with clean sites/ fields using mechanical means or an effective burndown herbicide program. These practices improve competitiveness against weeds.
- Clean equipment before moving to a different site/field to avoid spread of resistant weeds.

<sup>&</sup>lt;sup>6</sup> Control of leafy spurge requires a tank mix with **Plateau® herbicide**. Refer to **Leafy Spurge Control** in **Specific Use Information** section.
<sup>7</sup> Not controlled in California.

<sup>&</sup>lt;sup>2</sup> Suppression only

<sup>&</sup>lt;sup>3</sup> Not controlled in California

- Scout sites/fields before application to ensure herbicides and rates will be appropriate for the weeds species and weed sizes present.
- Always follow labeled application rate and weed growth stage specifications.
- DO NOT rely on a single herbicide site of action for weed control during the year.
- Avoid application of herbicides with the same site of action more than twice a year.
- Use tank mixes or premixes with other herbicides possessing different sites of action that are also effective on the target weeds.
- Scout sites/fields after herbicide application to identify areas where weed control was ineffective.
- Control weed escapes with herbicides possessing a different site of action or use a mechanical control measure. Weed escapes should not be allowed to reproduce by seed or to proliferate vegetatively.
- Contact your **Detail** herbicide supplier and/or a BASF representative to report weed escapes.
- Consult a BASF representative, local or state cooperative extension service, professional consultants or advisors, or other qualified authority to determine appropriate actions if you suspect resistant weeds.
- Suspected herbicide-resistance weeds may be identified by these indicators:
  - failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
  - a spreading patch on non-controlled plants of a particular weed species; and
  - surviving plants mixed with controlled individuals of the same species.

## **Application Instructions**

**Detail herbicide** may be applied in a single application or sequentially. Sequential applications must be separated by at least 14 days.

## **Application Rate**

Application rates for **Detail herbicide** when applied alone, in tank mix, or sequentially are given in **Table 3**. **DO NOT** apply more than a maximum cumulative amount of 6 fl ozs/A of **Detail herbicide** per year.

In California, **DO NOT** apply more than 2 fl ozs/A of **Detail herbicide** in a single application.

**Table 3. Detail herbicide Application Rates** 

Application	Application Target	Application Rate (fl ozs/A)	
	Weed size < 6 inches	2 to 4	
Postemergence	Weed size ≥ 6 inches and/or heavier weed infestations	4 to 6ª	
Postemergence + Residual	Burndown + Residual preemergence weed control	6 <sup>b</sup>	
Tank Mixes with Glyphosate			
Accelerated Burndown	Accelerated burndown of weeds and/or control of glyphosateresistant species [including kochia and Russian thistle]	1 to 5	
Accelerated Burndown + Residual	Accelerated burndown of weeds plus control of glyphosate-resistant species with residual preemergence weed control	6 <sup>b</sup>	

<sup>&</sup>lt;sup>a</sup> Partial control or suppression may result with application to weeds greater than 6 inches.

## **Application Methods and Equipment**

**Detail herbicide** may be applied by air or ground. Thorough 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 for adequate spray volume, 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 will increase rates above use rates specified in this label.

## Aerial Application Requirements - Helicopter

Water Volume. Use 15 or more gallons of water per acre.

**DO NOT** apply aerially in California.

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

- 1. The distance of the outermost nozzles on the boom must not exceed 75 to 80% of rotor blade diameter.
- 2. Use Accu-Flo<sup>™</sup> .028 nozzles or larger. **DO NOT** use nozzles producing a smaller droplet size than Accu-Flo .028.
- 3. Orient nozzles so spray is released parallel to the airstream.

<sup>&</sup>lt;sup>b</sup>For effective residual control of labeled weed species, **Detail herbicide** must be used at the maximum use rate of 6 fl ozs/A.

- 4. Without compromising aircraft safety, applications should be made at a height of 10 feet or less above the target vegetative canopy.
- DO NOT apply when wind speed is greater than 10 miles per hour, during periods of temperature inversions or stable atmospheric conditions.
- 6. Avoid potential adverse effects to nontarget areas by maintaining a (XX, see **Table 4**)<sup>a</sup> foot buffer between the point of direct application and the **closest downwind edge** of sensitive terrestrial habitats (including grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas, and shrub lands).

Table 4. Wind-directional Buffer Zone Distances for Helicopter Applications when Adjacent to Sensitive Terrestrial Habitats

Detail® herbicide Use Rate (fl ozs/A)	Buffer Zone Distance (feet)
1	5
2	5
4	15
6	30

## **Aerial Application Requirements - Fixed-wing Aircraft**

Water Volume. Use 15 or more gallons of water per acre.

**DO NOT** apply aerially in California.

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.
- Use low-drift straight-stream nozzles (D-8 or larger).DO NOT use nozzles producing a mist droplet spray.
- Nozzles must always point backward parallel with the airstream and never point downward more than 45 degrees.
- 4. Without compromising aircraft safety, application should be made at a height of 10 feet or less above the plant canopy or tallest plants.
- DO NOT apply when wind speed is greater than 10 miles per hour, during periods of temperature inversions or stable atmospheric conditions.
- 6. Avoid potential adverse effects to nontarget areas by maintaining a (XX, see **Table 5**)<sup>a</sup> foot buffer between the point of direct application and the **closest downwind edge** of sensitive terrestrial habitats (including grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas, and shrub lands).

Table 5. Wind-directional Buffer Zone Distances for Fixed-wing Aircraft Applications when Adjacent to Sensitive Terrestrial Habitats

Detail herbicide Use Rate (fl ozs/A)	Buffer Zone Distance (feet)
1	26
2	66
4	100
6	150

## Ground Application Requirements - Broadcast

Water Volume. Use 20 or more gallons of water per acre.

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

- 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 application 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 if 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. In California, nozzles must be affixed to spray no higher than 20 inches above the spray target (e.g. top of weed foliage).
- Apply this product only when the potential for drift to adjacent nontarget areas is minimal (e.g. when wind is 10 MPH or less and is blowing away from sensitive areas). DO NOT apply during periods of temperature inversions or stable atmospheric conditions.
- 3. Avoid potential adverse effects to nontarget areas by maintaining a (XX, see **Table 6**)<sup>a</sup> foot buffer (120-feet in California) between the application area and the **closest downwind edge** of sensitive terrestrial habitats (including grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas, and shrub lands).

Table 6. Wind-directional Buffer Zone Distances for Ground Applications when Adjacent to Sensitive Terrestrial Habitats

Detail herbicide Use Rate (fl ozs/A)	Buffer Zone Distance (feet)
1	13
2	33
4	50
6	75

<sup>&</sup>lt;sup>a</sup> Buffer zone size is determined by use rate. Refer to **Table 4** below for minimum buffer zone distance required for the intended use rate. Use the appropriate buffer zone distance from the table below in the buffer zone statement above.

<sup>&</sup>lt;sup>a</sup> Buffer zone size is determined by use rate. Refer to **Table 5** below for minimum buffer zone distance required for the intended use rate. Use the appropriate buffer zone distance from the table below in the buffer zone statement above.

<sup>&</sup>lt;sup>a</sup> Buffer zone size is determined by use rate. Refer to **Table 6** below for minimum buffer zone distance required for the intended use rate. Use the appropriate buffer zone distance from the table below in the buffer zone statement above.

#### **Ground Application - Spot**

Postemergence spot application may be made with **Detail® herbicide**. Spray volumes must be sufficient to thoroughly wet target foliage but not to the point of runoff, i.e. a spray-to-wet basis. Use 0.25% to 0.50% volume/ volume (v/v) spray solution for control of weeds less than 6 inches. For larger weeds or under heavy weed infestations, increase spray solution to 0.50% to 1.00% v/v. Spot application also requires the use of an adjuvant; add methylated seed oil (MSO) at the rate of 1.0% v/v. See **Table 7** for amount(s) of **Detail herbicide** to prepare spray solutions for spot application.

Table 7. Amount of Detail herbicide for Spot Application

Detail herbicide Required  (fl ozs)  for Spot Application				
Spray Solution to Prepare Desired Concentration		ion		
(gals)	0.25%	0.50%	0.75%	1.00%
5	1.6	3.2	4.8	6.4
50	16.0	32.0	48.0	64.0
100	32.0	64.0	96.0	128.0

<sup>2</sup> tablespoons = 1 fluid ounce, 1 pint = 16 fluid ounces,

## 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 must 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 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 **Detail herbicide** and to achieve consistent weed control in postemergence use patterns, an adjuvant system must be used that includes the following:

Adjuvant	Rate
Methylated seed oil (MSO) <sup>1</sup>	1 gal/100 gals (1% v/v) <sup>2</sup>

<sup>&</sup>lt;sup>1</sup> MSO-based adjuvant **MUST** contain at least 60% methylated seed oil. Poor performance may occur with adjuvants containing less than 60% methylated seed oil.

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

**DO NOT** add acidifying agents to the spray tank when applying **Detail herbicide**.

#### **Tank Mixing Information**

**Detail herbicide** 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. For all tank mixing with **Detail herbicide**, it is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended

<sup>1</sup> quart = 32 fluid ounces, 1 gallon = 128 fluid ounces

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

use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

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

## **Compatibility Test for Mix Components**

Before mixing components, always perform a compatibility jar test.

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

- 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.
- 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 (dry and liquid fertilizers)
- 5. Water-dispersible products (including dry flowables, wettable powders, suspension concentrates, or suspo-emulsions)
- 6. Water-soluble products
- 7. Emulsifiable concentrates (including MSO adjuvants)
- 8. Remaining quantity of water

#### **Use Restrictions**

- Maximum annual use rate DO NOT apply more than a maximum cumulative amount of 6 fl ozs/A of Detail herbicide (0.134 pound active ingredient saflufenacil per acre) per year from broadcast or banded applications.
- Minimum Re-treatment Interval for all applications -14 days.
- DO NOT contaminate irrigation ditches or water used for domestic purposes.
- **DO NOT** apply through any type of irrigation system (e.g. chemigation).
- DO NOT apply Detail herbicide to irrigation ditches or ditchbanks that contain irrigation water or will contain irrigation water within 2 weeks.
- Detail herbicide is not for sale, distribution, or use in Nassau and Suffolk counties in New York State.

#### **Specific Use Information**

**Detail herbicide** may be used for selective or nonselective weed control for labeled uses. This section provides use directions for **Detail herbicide** in various noncrop situations. Read product information, mixing, application, weeds controlled, and adjuvant instructions in preceding sections of the label. Read and follow tank mix product labels for restrictions, precautions, instructions, and rotational crop restrictions.

#### **Conifer and Hardwood Plantations**

#### **Application Method, Rate, and Timing**

Apply **Detail herbicide** for the control of volunteer conifers and other undesirable plants during site preparation operations conducted before planting and establishment of conifer and hardwood plantations, or as an understory application below the tree canopy of establishment conifer and hardwood plantations. Refer to **Table 1**, **Table 2**, and **Table 3** for lists of weeds controlled and application rates.

**DO NOT** apply **Detail herbicide** as an over-the-top spray on desirable conifer or hardwood plantings or severe injury will occur.

**DO NOT** plant tree seedlings within 2 months after **Detail herbicide** application.

#### **Site Preparation Application**

Apply **Detail herbicide** with a labeled rate of a glyphosate-based product plus the required adjuvant (refer to **Additives** section for specifics) as a uniform broadcast application during preplant site preparation for control of volunteer conifers and other undesirable plants in plantations and for enhanced brownout with other site-preparation tank mixes.

### **Volunteer Conifer Control**

For best control of volunteer conifer, apply **Detail® herbicide** with a labeled rate of a glyphosate-based product plus the required adjuvant (see **Additives** section for specifics) in addition to other tank mix herbicides. Make foliar applications in the spring, summer, and early fall when volunteer conifer seedlings are actively growing. Mid-to-late fall applications to volunteer conifer that are slowing their growth may not provide consistent control.

Thorough spray coverage is essential for control. Use a spray volume of 15 gallons of water per acre or more for aerial application. For ground application, use a spray volume of 25 gallons of water per acre or more for broadcast foliar applications to provide thorough spray coverage.

## Understory Application in Established Plantations

Apply **Detail herbicide** with a labeled rate of a glyphosate-based product or other tank mix partner plus the required adjuvant (refer to **Additives** section for specifics) as a postemergence-directed, uniform broadcast or uniform banded, or as a spot spray application below the canopy of established conifer or hardwood plantings for control of targeted emerged weeds and/or undesirable brush and other tree species.

#### **Tank Mixes**

Broad-spectrum burndown and/or residual control of grass weeds, volunteer conifers, or additional broadleaf weeds requires a tank mix with another herbicide. **Detail herbicide** may also be tank mixed or applied sequentially with one or more of, but not limited to, the following herbicide products:

- Arsenal® herbicide Applicators Concentrate
- Chopper<sup>®</sup> Gen2<sup>™</sup> herbicide
- Finale® herbicide
- Finale® VU herbicide
- Finale® XL herbicide
- Frequency® herbicide
- glyphosate

## **Industrial Landscaping**

**Detail herbicide** may be used in industrial landscapes and landscaped highway medians, interchanges, embankments, and buffer areas where perennial plants are established.

## Application Method, Rate, and Timing

#### **Selective Weeding**

Apply **Detail herbicide** with a labeled rate of a glyphosate-based product plus the required adjuvant (refer to **Additives** section for specifics) for selective weed control as a postemergence-directed spray, uniform broadcast application, or as a spot application around established trees and/or woody shrubs while targeting emerged weeds. Refer to **Table 1**, **Table 2**, and **Table 3** for lists of weeds controlled and application rates. Spray contact of

leaves, stems, green shoots, or buds directly via improper nozzle orientation or indirectly via physical drift will result in plant injury.

Desirable industrial landscape vegetation must be established for at least 9 months before application. Apply **Detail herbicide** at least one dripline length away from desirable industrial landscape vegetation.

**DO NOT** make over-the-top application to any desirable industrial landscape vegetation or severe plant injury will occur.

#### **Tank Mixes**

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

- Finale herbicide
- Finale VU herbicide
- Finale XL herbicide
- Frequency herbicide
- Pendulum<sup>®</sup> AquaCap<sup>™</sup> herbicide
- Plateau® herbicide
- Segment® II herbicide
- Tower® herbicide
- glyphosate

## **Leafy Spurge Control**

#### Use not permitted in California.

Apply **Detail herbicide** in tank mixture with **Plateau herbicide** to control leafy spurge in the late spring/early summer in pasture and rangeland and other areas described in this label. This tank mixture will also control additional weeds listed on the respective **Detail herbicide** and **Plateau herbicide** labels. **Detail herbicide** plus **Plateau herbicide** tank mix may be applied by air or ground.

Apply **Detail herbicide** at 1 to 2 fl ozs/A plus **Plateau herbicide** at 4 to 6 fl ozs/A to leafy spurge when it reaches the yellow bract (pre-bloom) stage in late spring/early summer. **DO NOT** apply this tank mix as a fall application because control may not be satisfactory.

**Spray Additives. Detail herbicide** plus **Plateau herbicide** tank mix requires the use of an effective adjuvant system. For best results, use nonionic surfactant at 0.25% v/v plus ammonium sulfate at 8.5 to 17.0 lbs/ 100 gals [1% to 2% weight/volume (w/v)]. Crop oil concentrate or methylated seed oil may also be used with this tank mixture when injury (stunting, necrosis) to grasses is acceptable.

**Water Volume.** Use 5 or more and 10 or more gallons of water per acre for aerial and ground application, respectively. Thorough coverage of weeds is essential and higher spray volumes may be necessary for performance on a heavy population of leafy spurge.

#### **Native Grass Areas**

#### Use not permitted in California.

**Detail®** herbicide may be used for establishment and maintenance of native grass and natural areas (including wildlife management areas, wildlife openings, wildlife food plots, and wildlife habitats).

## **Application Method, Rate, and Timing**

Apply **Detail herbicide** as a postemergence spray plus the required adjuvant (refer to **Additives** section for specifics) as a uniform broadcast application for selective broadleaf weed control in native grass areas and unimproved turf. Refer to **Table 1**, **Table 2**, and **Table 3** for lists of weeds controlled and application rates. Transitory injury may be observed on certain grass species including Bermudagrass and Bahiagrass at higher use rates.

Grasses treated with **Detail herbicide** may be grazed with no pre-grazing interval.

## **Nursery Maintenance**

## Application Method, Rate, and Timing

Apply **Detail herbicide** for nursery maintenance in areas where ornamental plants are not currently being grown, including: gravel or stone pathways, roads within the nursery, dry irrigation ditches and/or ditchbanks, unused gravel pads within nursery blocks, or nursery pads not currently in production.

Refer to **Table 1**, **Table 2**, and **Table 3** for lists of weeds controlled and application rates.

Apply **Detail herbicide** plus the required adjuvant (refer to **Additives** section for specifics) as a postemergence-directed spray or as a spot application targeted to emerged weeds.

**DO NOT** apply directly to ornamental plants or use in container-grown ornamentals.

**DO NOT** place plants on treated gravel pads within nursery blocks for 30 days after application.

#### **Tank Mixes**

Broad-spectrum burndown and/or residual control of grass weeds or additional broadleaf weeds requires a tank mix with another herbicide. Apply **Detail herbicide** with a labeled rate of glyphosate-based product plus the required adjuvant (refer to **Additives** section for specifics). **Detail herbicide** may also be tank mixed or applied sequentially with one or more of, but not limited to, the following herbicide products:

- Finale® herbicide
- Finale® VU herbicide
- Finale® XL herbicide
- Pendulum<sup>®</sup> AquaCap<sup>™</sup> herbicide
- Segment® II herbicide
- Tower® herbicide
- glyphosate

## **Pasture and Rangeland**

#### Use not permitted in California.

**Detail herbicide** may be applied for broadleaf weed control (refer to **Table 1** and **Table 2** for list of weeds controlled) in perennial cool-season and warm-season forage grasses grown in pastures or rangeland or Federal Conservation Reserve Program (CRP) land for livestock grazing.

Before applying **Detail herbicide** to forage grasses, verify the selectivity of **Detail herbicide** on your variety with your local seed company (supplier) to help avoid potential injury to sensitive varieties.

#### Application Method, Rate, and Timing

Apply **Detail herbicide** only to established (defined as planted in fall or spring which has gone through a first cutting/mowing) stands of perennial cool-season and warm-season forage grasses.

**Detail herbicide** may cause transitory injury to forage grasses (leaf necrosis) under certain conditions, but new growth is normal and vigor is not reduced.

Disease, extremely cold weather, drought, extensive frost heaving, low or high pH, salinity, and other environmental pressures may weaken grass stands and make the crop more susceptible to herbicide injury.

## Dormant-season Application for Burndown and Residual Weed Control in Warm-season and Cool-season Grasses

Apply **Detail herbicide** at 1 to 2 fl ozs/A as a broadcast burndown spray to emerged broadleaf weeds in the dormant season [i.e. when grasses are not actively growing in the fall (postharvest), during winter dormancy period, or in early spring before greenup]. An adjuvant system is required for optimum broadleaf burndown activity.

For additional residual broadleaf weed control, **Detail herbicide** can be applied anytime in the dormant season (as previously described) at rates of 3 to 4 fl ozs/A.

Sequential applications of **Detail herbicide** may be made within the dormant season if the maximum cumulative amount does not exceed 4 fl ozs/A of **Detail herbicide**. Apply dormant-season burndown applications sequentially where the first burndown application is made fall (postharvest) or during winter dormancy period, and the second application is made in early spring before greenup. Separate sequential dormant-season burndown applications by at least 14 days.

Specific Adjuvant Requirements for Dormantseason Application in Warm-season and Cool-season Grasses. For optimum postemergence control of emerged broadleaf weeds, use the following adjuvants with **Detail herbicide**:

Methylated seed oil (MSO) at 1% volume/volume (v/v)

## In-season Postemergence Application for Weed Control in Cool-season Grasses

Apply **Detail®** herbicide at 1 to 2 fl ozs/A as a broadcast postemergence spray to control emerged broadleaf weeds in season (i.e. actively growing cool-season forage grasses). Make in-season application before weeds reach the maximum size listed in **Table 3**. Postemergence application requires the addition of an adjuvant system.

Specific Adjuvant Requirements for In-season Postemergence Application in Cool-season Grasses. For optimum postemergence control of emerged broadleaf weeds, use the following adjuvant with Detail herbicide:

- MSO at 1% v/v
- Some cool-season grass species, including Timothy, may exhibit crop response including leaf burn and leaf trapping when adding a nitrogen-containing fertilizer with postemergence application of **Detail herbicide**.

## In-season Postemergence Application for Weed Control in Warm-season Grasses

Apply **Detail herbicide** at 1 to 2 fl ozs/A as a broadcast postemergence spray to control emerged broadleaf weeds in season (i.e. actively growing warm-season forage grasses). In-season postemergence application can be made in the spring after greenup. Make in-season application before weeds reach the maximum size listed in **Table 3**. Postemergence application requires the addition of an adjuvant system.

**DO NOT** apply **Detail herbicide** in-season postemergence on Bahiagrass, buffalograss, and switchgrass.

**DO NOT** exceed 1 fl oz/A of **Detail herbicide** in forage Bermudagrass applied in-season postemergence (i.e. after greenup) because higher rates may cause unacceptable grass injury.

**Specific Adjuvant Requirements for Postemergence Application in Warm-season Grasses.** For optimum postemergence control of emerged broadleaf weeds, use the following adjuvant with **Detail herbicide**:

- MSO at 1% v/v
- DO NOT add nitrogen-containing fertilizers when applying Detail herbicide to warm-season grasses.

## Sequential Applications in Warm-season and Cool-season Grasses

**Detail herbicide** may be applied as a sequential or split program where application(s) is made in the dormant season and subsequent application(s) is made postemergence in season after greenup. **DO NOT** apply more than a maximum cumulative amount of 6 fl ozs/A of **Detail herbicide** per season.

In-season postemergence application of **Detail herbicide** may also be applied sequentially; separate sequential applications by at least 14 days. The maximum cumulative amount for in-season postemergence applications must not exceed 2 fl ozs/A of **Detail herbicide**.

#### **Tank Mixes**

Broad-spectrum control of grass weeds and/or additional broadleaf weeds requires a tank mix with another herbicide. Read and follow the applicable restrictions and limitations and directions for use on the other product label. The most restrictive labeling applies to tank mixes. **Detail herbicide** may be tank mixed or applied sequentially with other herbicide products.

## **Use-specific Restrictions**

- DO NOT apply more than a maximum cumulative amount of 6 fl ozs/A of Detail herbicide per season.
- For a mixed stand of cool-season and warm-season grasses, follow use directions for warm-season grasses when applying **Detail herbicide** in-season postemergence.
- DO NOT apply Detail herbicide to mixed stands of grass and forage legumes or to grass stands containing other desirable broadleaf species. Detail herbicide application will kill or cause severe injury to alfalfa, clover, other legumes, and most broadleaf species.
- There is no preharvest or pre-grazing interval for **Detail** herbicide-treated grass forage, hay, pasture, or
   rangeland.
- **DO NOT** apply **Detail herbicide** to stands of annual forage (e.g. forage sorghum, Sudangrass).

## Vegetation Control and Management in Noncropland Areas

**Detail® herbicide** may be applied in and/or around to the following noncropland areas where vegetation control and/or management is needed to maintain the site(s):

- Access roads
- Airfields
- Airports
- Alleys
- Barns
- Barrier strips
- Beaches
- Campgrounds
- Commercial sites including retail centers, strip malls, shopping malls
- Construction sites
- Ditch banks (dry irrigation or non-irrigation, drainage, canals)
- Ditches (dry, dry drainage)
- Drive-in theaters
- Driveways
- Educational facilities
- Farmstead areas (barnyards, buildings, driveways, facilities, machinery or implement yards, windbreaks)
- Fences, fence lines, boarder fencing, fence rows
- Fire breaks, fire rehabilitation areas
- Fuel storage facilities
- Government and military installations including bases, airports, ranges (all types)
- Grain facilities
- Gravel yards
- Greenhouse settings
- Habitat restoration areas
- Hardscapes
- Industrial plants/sites
- Landfill sites
- Lanes
- Livestock facilities
- Lumberyards
- Manufacturing plants/sites
- Mines (all types) and mine reclamation areas
- Municipal sites
- Natural areas including parks (national, state, county, city)
- Nuclear plant sites
- Office buildings
- Outbuildings
- Parking areas, lots
- Parks
- Paths
- Paved areas
- Pipelines
- Power plants, stations
- Prairies
- Prisons and correctional facilities
- Private and public managed lands including Bureau of Land Management grounds, national parks and forests, public managed grounds
- Pumping stations or installations

- Railroads, rail yards, rail lines of sight
- Ramps
- Recreational areas and open spaces including parks, restoration areas, RV camping/parking areas, camp and hunting grounds, off-road transportation paths/trails, ball courts
- Refineries
- Resorts
- Rights-of-way (electrical, highway, industrial, pipeline, rail, utility)
- Roadsides (aprons, medians, guardrails)
- Roadways/highways including interstate highways (federal, state, city and county), expressways, tollways, county roads
- Sewage disposal areas
- Shelter belts
- Sidewalks and walkways
- Solar farms
- Sports and motorsports complexes
- Storage shed sites, areas
- Structures (commercial, industrial, farm, ranch, wayside)
- Tank farms (petroleum, other)
- Trails and trailheads
- Transitional areas between upland and lowland sites (when dry)
- Utility buildings, plant sites, substations
- Vacant lots
- Waste disposal sites
- Wastelands
- Wetlands (seasonally dry with intermittently flooded low lying areas like flood plains, deltas, marshes, swamps, bogs)
- Wind farms, wind turbine stations

## Application Method, Rate, and Timing

## **Selective Weeding**

Apply as a postemergence spray of **Detail herbicide** with a labeled rate of a glyphosate-based product plus the required adjuvant (refer to **Additives** section for specifics) as a uniform broadcast application for selective weed control (e.g., broadleaves and volunteer conifers). Refer to

**Table 1**, **Table 2**, and **Table 3** for lists of weeds controlled and application rates.

**Tank Mixes.** Broad-spectrum postemergence and/or residual control of grass weeds or additional broadleaf weeds requires a tank mix with another herbicide. **Detail herbicide** may also be tank mixed or applied sequentially with one or more of, but not limited to, the following herbicide products:

- Arsenal<sup>®</sup> herbicide
- Arsenal® herbicide Applicators Concentrate
- Arsenal® PowerLine<sup>TM</sup> herbicide
- Finale® herbicide
- Finale® VU herbicide
- Finale® XL herbicide
- Frequency<sup>®</sup> herbicide
- Overdrive® herbicide
   Plateau® herbicide
- glyphosate

#### **Bareground**

Detail® herbicide provides contact burndown of emerged weeds plus rate-dependent residual preemergence control of annual weeds. Apply Detail herbicide with a labeled rate of a glyphosate-based product plus the required adjuvant (refer to Additives section for specifics) as a uniform broadcast application. For effective residual broadleaf weed control, Detail herbicide must be applied at the maximum use rate of 6 fl ozs/A. The actual length of residual control depends on factors including application rate, soil type, organic matter, weed pressure, and rainfall amounts after application. Adequate precipitation is necessary to activate Detail herbicide. Dry weather following application may reduce effectiveness. Refer to Table 1, Table 2, and Table 3 for lists of weeds controlled and application rates.

**Tank Mixes.** Broad-spectrum postemergence and/or residual control of grass weeds or additional broadleaf weeds requires a tank mix with another herbicide. **Detail herbicide** may also be tank mixed or applied sequentially with one or more of, but not limited to, the following herbicide products:

- Arsenal® herbicide
- Arsenal<sup>®</sup> PowerLine<sup>™</sup> herbicide
- Finale® herbicide
- Finale® VU herbicide
- Finale® XL herbicide
- Frequency® herbicide
- Pendulum<sup>®</sup> AquaCap<sup>™</sup> herbicide
- Plateau® herbicide
- diuron
- glyphosate

#### Right of Way

Broadcast Application. Apply Detail herbicide for rapid brownout of volunteer conifers, including loblolly pine (Pinus taeda) and Virginia pine (P. virginiana) and other conifer species. For best control, apply Detail herbicide at 2 to 6 fl ozs/A with a labeled rate of a glyphosate-based product plus the required adjuvant (refer to Additives section for specifics) as a uniform broadcast application. Make foliar applications in the spring to summer when volunteer conifers are actively growing. Fall application may not provide consistent control. Use a spray volume of 20 gallons water per acre or more for broadcast foliar applications for thorough spray coverage.

**Tank Mixes.** Broad-spectrum postemergence and/or residual control of grass weeds or additional broadleaf weeds requires a tank mix with another herbicide. **Detail herbicide** may also be tank mixed or applied sequentially with one or more of, but not limited to, the following herbicide products:

- Arsenal herbicide
- Arsenal PowerLine herbicide
- Finale herbicide
- Finale VU herbicide
- Finale XL herbicide
- Milestone® herbicide
- glyphosate

## **Selective Stem Application**

Apply **Detail herbicide** in a tank mix with glyphosate and/ or other tank mix herbicides, plus the required adjuvant (refer to **Additives** section for specifics), for rapid brownout of woody species using a directed-foliar individual plant treatment. For enhanced brownout of volunteer conifers (including loblolly pine [Pinus taeda] and Virginia pine [P. virginiana]), tank mix with glyphosate or other conifer control herbicides. Make selective stem applications of **Detail herbicide** using backpack or hydraulic handgun equipment. For best results, apply Detail herbicide at a rate range of 0.125% to 1.0% v/v with a tank mix partner (refer to tank mix partner label for the use rate). The proper spray pattern for selective stem applications is to uniformly wet all foliage on the target plant, but **DO NOT** drench target vegetation causing spray solution to run off. Excessive wetting of foliage to runoff is not necessary. For best results, make selective stem applications with methylated seed oil at 1% v/v as the adjuvant. Apply **Detail herbicide** up to but **DO NOT** exceed 16 fl ozs/A (0.356 pound active ingredient saflufenacil per acre) with selective stem applications.

## **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. Plant 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 Agricultural Solutions US LLC ("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.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S EXCLUSIVE REMEDY AND BASF'S EXCLUSIVE LIABILITY, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE, SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE OF THE PRODUCT.

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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**AquaCap**, **Gen2**, **PowerLine**, and **Pylex** are trademarks of BASF.

**Milestone** is a registered trademark of Dow AgroSciences LLC.

#### **Tank Mix Partners**

Arsenal Herbicide (imazapyr, EPA Reg. No. 241-346)
Arsenal Herbicide Applicators Concentrate

(imazapyr, EPA Reg. No. 241-299)

**Arsenal Powerline Herbicide** 

(imazapyr, EPA Reg. No. 241-431)

**Arsenal Railroad Herbicide** 

(imazapyr, EPA Reg. No. 241-273)

**Arsenal Herbicide** (imazapyr, EPA Reg. No. 241-346)

**Chopper Gen2 Herbicide** 

(imazapyr, EPA Reg. No. 241-430)

**Chopper Herbicide** (imazapyr, EPA Reg. No. 241-296) **Finale Herbicide** (glufosinate, EPA Reg. No. 7969-444)

Finale VU Herbicide

(glufosinate, EPA Reg. No. 7969-443)

**Finale XL Herbicide** 

(glufosinate, EPA Reg. No. 7969-xxx)

**Frequency Herbicide** 

(topramezone, EPA Reg. No. 7969-281)

Milestone Herbicide

(aminopyralid, EPA Reg. No. 62719-519)

**Overdrive Herbicide** 

(dicamba, diflufenzopyr, EPA Reg. No. 7969-150)

Pendulum AquaCap Herbicide

(pendimethalin, EPA Reg. No. 241-416)

Plateau Herbicide (imazapic, EPA Reg. No. 241-365)

Pylex Herbicide (topramezone, EPA Reg. No. 7969-327)

Segment II Herbicide

(sethoxydim, EPA Reg. No. 7969-398)

**Tower Herbicide** 

(dimethenamid-P, EPA Reg. No. 7969-239)

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