Group 4 9 Herbicide



# ONDECK

For control of a wide-spectrum of annual, biennial, and perennial broadleaf weeds and brush in General Farmstead Areas; Forest Management; Roadsides, Rights-of-way, Industrial Sites and similar Non-crop areas.

#### **ACTIVE INGREDIENT(S):**

3.6-dichloro-o-anisic acid*	
• • • • • • • • • • • • • • • • • • • •	<u>65.04%</u>
TOTAL	

#### Equivalent to:

# DANGER/PELIGRO

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 you in detail.)

#### SEE INSIDE PANEL FOR ADDITIONAL PRECAUTIONS AND DIRECTIONS FOR USE

EPA Reg. No. 42750-144-5905 EPA Est. No. 42750-MO-001 AD 032416

NET CONTENTS: □ 1 Gallon

□ 2.5 Gallons

MANUFACTURED FOR HELENA CHEMICAL COMPANY 225 SCHILLING BOULEVARD, SUITE 300 COLLIERVILLE, TN 38017

<sup>\*</sup>Dicamba Acid, 1.0 lbs./gal. (CAS # 1918-00-9)

<sup>\*\*2,4-</sup>D Acid, 2.3 lbs./gal. (CAS # 94-75-7) Isomer specific by AOAC Method 6.D01-5 (12th Ed.)

	FIRST AID
IF IN EYES:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> </ul>
	<ul> <li>Remove contact lenses, if present, after first 5 minutes, then continue</li> </ul>
	rinsing eye.
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
IF INHALED:	<ul> <li>Move person to fresh air.</li> </ul>
	<ul> <li>If person is not breathing, call 911 or an ambulance, then give artificial</li> </ul>
	respiration, preferably mouth-to-mouth if possible.
	<ul> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
IF SWALLOWED:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> </ul>
	<ul> <li>Have a person sip a glass of water if able to swallow.</li> </ul>
	<ul> <li>Do not induce vomiting unless told to do so by a poison control center or</li> </ul>
	doctor.
	<ul> <li>Do not give anything by mouth to an unconscious or convulsing person.</li> </ul>
	<ul> <li>Take off contaminated clothing.</li> </ul>
CLOTHING:	<ul> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> </ul>
	<ul> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
	ne product container or label with you when calling a poison control center or
doctor or going for treatment. information.	You may also contact 1-800-424-9300 for emergency medical treatment

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

Corrosive. Causes irreversible eye damage. Harmful if inhaled. Harmful if swallowed. Do not get in eyes or on clothing. Avoid contact with skin. Avoid breathing spray mist.

#### PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical-resistant to this product are butyl rubber, natural rubber, neoprene rubber or nitrile rubber.

All mixers, loaders, applicators, flaggers and other handlers must wear:

- Long-sleeved shirt and long pants,
- Chemical-resistant gloves (except for applicators using groundboom equipment, pilots and flaggers)
- Chemical resistant apron when applying postharvest dips or sprays to citrus, mixing, or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.
- Shoes plus socks, and
- Protective eyewear (goggles, faceshield, or safety glasses).

See engineering controls for additional requirements.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. After each day of use, clothing or PPE must not be re-used until it has been cleaned.

If this container contains over 1 gallon and less than 5 gallons, mixers and loaders who do not use a mechanical system (probe and pump) to transfer the contents of this container must wear coveralls or a chemical-resistant apron in addition to the other required PPE.

If this container contains 5 gallons or more in capacity, do not open pour. A mechanical system (such as a probe and pump or spigot) must be used for transferring the contents of this container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal. If the mechanical system is used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)], the handler PPE requirements may be reduced or modified as specified in the WPS.

#### **ENGINEERING CONTROL STATEMENTS**

When handlers use 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.

Pilots must use cockpits in a manner that meets the requirements, listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-6).

#### **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 change into clean clothing. If pesticide gets on skin, wash immediately with soap and water.
- 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**

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash water or rinsate.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

Groundwater Contamination: Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

#### **Endangered Species Concerns:**

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of federal law.

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation. This labeling must be in the user's possession during application.

Use of this product in certain portions of California, Oregon and Washington is subject to the January 22, 2004 Order for injunctive relief in <u>Washington Toxics Coalition</u>, et al. v. EPA, C01-0132C, (W.D. WA). For further information, please refer to EPA Web Site: <a href="http://www.epa.gov/espp">http://www.epa.gov/espp</a>.

#### 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 48 hours.

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 worn over short-sleeved shirt and short pants.
- Chemical resistant gloves made of any waterproof material
- Chemical resistant footwear plus socks
- Chemical-resistant headgear for overhead exposure
- Protective eyewear

Notify workers of the application by warning them orally and by posting warning signs at the entrance to treated areas.

#### NON-AGRICULTURAL 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 or allow people (or pets) to enter the treated area until sprays have dried.

**USE REQUIREMENTS FOR NONCROP AREAS:** Do not enter treated areas until spray has dried. For

early entry to treated areas, wear eye protection, chemical-resistant gloves, long-sleeved shirt, long pants, shoes and socks.

**TURF USE REQUIREMENTS:** Do not allow persons (other than applicator) or pets on treated area during application. Do not enter treated areas until spray has dried.

**NOTE:** For application to turf being grown for sale or other commercial use as sod, or for commercial seed production, or for research purposes, follow AGRICULTURAL USE REQUIREMENTS on this label.

#### STORAGE AND DISPOSAL

**PROHIBITIONS:** Do not contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Do not store below temperature of 32°F or above 100°F. Store in original container in a well-ventilated area separately from fertilizer, feed, and foodstuffs. Keep container tightly closed when not in use. Reduce stacking height where local conditions can affect package strength. Do not store under conditions that might adversely affect the container or its ability to function properly.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law and may contaminate groundwater. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** Non-refillable containers (1, 2.5, 30 & 55 gallon): Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

(Non-refillable <5 gallons): Triple rinse 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 ¼ 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(Non-refillable >5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ½ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Pressure rinse as follows (all sizes):** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use for disposal. Insert pressure rinsing nozzle

inside of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

**Refillable container (250 gallon & bulk):** Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

To clean the container before final disposal, empty the remaining contents from the container into application equipment or mix tank. Fill the container about 10 percent 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 process two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**In Case of Spill:** In case of large-scale spillage regarding this product, call CHEMTREC at 1-800-424-9300.

#### 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 re-use. Keep the spill out of all sewers and open bodies of water.

#### WEED RESISTANCE MANAGEMENT

**ON DECK™** is both a Group 4 and a Group 9 herbicide. Any weed population may contain plants naturally resistant to Group 4 and/or Group 9 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same fields.

#### To delay herbicide resistance:

- Where possible, rotate the use of **ON DECK™** within a growing season (sequence) or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group when such use is permitted. To delay
  resistance, the less resistance-prone partner should control the target weed(s) as effectively as the
  more resistance-prone partner.
- Herbicide use should be based on an integrated weed management program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical control methods), cultural (for example, higher crop seeding rates; precision fertilizer application method and timing to favour the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Monitor weed populations after herbicide application for signs of resistance development. If resistance
  is suspected, prevent weed seed production in the affected area if possible by an alternative herbicide
  from a different group. Prevent movement of resistant weed seeds to other fields by cleaning
  harvesting and tillage equipment when moving between fields, and planting clean seed.
- Have suspected resistant weed seeds tested by a qualified laboratory to confirm resistance and identify alternative herbicide options.

 Contact your local extension specialist or certified crop advisors for any additional pesticide resistancemanagement and/or integrated weed-management recommendations for specific crops and weed biotypes.

#### I. PRODUCT INFORMATION

**ON DECK™** is a postemergence herbicide for controlling a wide spectrum of annual, biennial, and perennial broadleaf weeds and brush in general farmstead areas; certain noncrop areas; and for forest management.

#### Mode of Action

ON DECK™ contains two active ingredients uniquely formulated to be used alone or tank mixed with other listed products as well as liquid fertilizer solutions. ON DECK™ is readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. ON DECK™ interferes with the plant's growth hormones (auxins) resulting in death of many broadleaf weeds.

For best results, thoroughly clean sprayer equipment (tank, lines and nozzles) immediately after use by flushing system with water and heavy duty detergent or other suitable tank cleaner.

#### II. APPLICATION INSTRUCTIONS

Apply **ON DECK™** at the rates and growth stages listed in Tables 1 and 2 as follows unless instructed differently by section on "Food/Feed Crop Specific Information" or "Non-Food/Feed Use (Land not Harvested, Grazed or Foraged)—Specific Information." **ON DECK™** may be applied using water or sprayable fluid fertilizer as a carrier. Sprayable fluid fertilizer may be used as the carrier in preplant or preemergence use for all crops listed on this label. Postemergence uses with sprayable fluid fertilizer may be made on pasture, hayland, or wheat crops only. The most effective application rate and timing varies based on the target weed species (refer to Table 1). In mixed populations of weeds the correct rate is determined by the weed species requiring the highest rate. Delaying application permits weeds to exceed the maximum size and will prevent adequate control. For certain specified applications liquid fertilizer or oil may replace part or all of the water as diluent. If dry flowable (DF), wettable powder (WP) or flowable (F) tank mix products are to be used, these should generally be added to the spray tank first. Follow the mixing directions on the labels of the tank mix products.

Apply product only when active weed growth is evident.

#### **CHEMIGATION PROHIBITION**

Do not apply this product through any type of irrigation system.

#### **Spray Coverage:**

Weeds must be thoroughly covered with spray. Dense leaf canopies shelter smaller weeds and prevent adequate spray coverage. Do not apply more than 2 applications per year.

#### **Sensitive Crop Precautions:**

**ON DECK™** may cause injury to desirable trees and plants, particularly beans, cotton, flowers, fruit trees, grapes, ornamentals, peas, potatoes, soybeans, sunflowers, tobacco, tomatoes and other broadleaf plants when contacting their roots, stems or foliage. At high temperatures (about 85 degrees or higher), vapors from this product may cause injury to the aforementioned susceptible crops. These plants are most

sensitive to **ON DECK™** during their development or growing stage. Do not treat areas where either possible downward movement into the soil or surface washing may cause contact of **ON DECK™** with the roots of desirable trees and shrubs.

#### **Drift Reduction Information:**

The following information may be helpful in reducing possible spray drift from ground or aerial applications. Avoid making applications when spray particle may be carried by air currents to areas where sensitive crops and plants are growing. Do not spray near sensitive plants if the wind is gusty or in excess of 5 mph and moving in the direction of nearby sensitive crops or if a temperature inversion exists. Always determine the direction and distance of possible spray drift prior to application. Leave an adequate buffer zone between area to be treated and sensitive plants. Coarse sprays are less likely to drift out of the target area than fine sprays. Properly maintain and calibrate all spray equipment. The use of agriculturally accepted drift retardants are acceptable and advised. Avoid applications within the vicinity of susceptible plants when at all possible. Do not apply in greenhouses.

#### AERIAL APPLICATION METHODS AND EQUIPMENT

**Water Volume:** Use 3-10 gallons of water per acre. Use the higher spray volume when treating dense or tall vegetation.

**Application Equipment:** Select nozzles designed to produce minimal amounts of fine spray particles. Make applications at the lowest stage height to reduce the exposure of spray droplets to evaporation and wind. The applicator must follow the most restrictive use cautions to avoid drift hazards, including those found in the this labeling as well as applicable state and local regulations and ordinances.

#### SPRAY DRIFT MANAGEMENT

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR.

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

#### **Droplet Size**

When applying sprays that contain 2,4-D as the sole active ingredient, or when applying sprays that contain 2,4-D mixed with active ingredients that require a Coarse or coarser spray, apply only as a Coarse or coarser spray (ASAE standard 572) or a volume mean diameter of 385 microns or greater for spinning atomizer nozzles.

When applying sprays that contain 2,4-D mixed with other active ingredients that require a Medium or more fine spray, apply only as a Medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

#### Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors ontarget deposition and there are not sensitive areas (including, but not limited to, residential areas, bodies of water, known habitat for nontarget species, nontarget crops) within 250 feet downwind. If applying a Medium spray, leave one swath unsprayed at the downwind edge of the treated field.

#### **Temperature Inversions**

If applying at wind speeds less than 3 mph, the applicator must determine if: (a) conditions of temperature inversion exist, or (b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

#### **Susceptible Plants**

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Susceptible crops include, but are not limited to, cotton, okra, flowers, grapes (in growing stage), fruit trees (foliage), soybeans (vegetable stage), ornamentals, sunflowers, tomatoes, beans and other vegetables, or tobacco. Small amounts of spray drift that might not be visible may injure susceptible broadleaf plants.

#### Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of 2,4-D herbicides. Where states have more stringent regulations, they must be observed.

#### **Equipment**

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety. This requirement does not apply to forestry or rights-of-way applications.

Do not apply with a nozzle height greater than 4 feet above the crop canopy.

Do not apply during conditions of low humidity and high temperatures.

#### **SENSITIVE AREAS**

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

#### Table 1. Application Rate and Timing – Annual Weeds

(For use in non-food/feed crops only: the addition of liquid fertilizer (28-0-0, 32-0-0) solutions at ½ the GPA spray solution has shown to give increased efficacy.)

Weeds Controlled	Rate Per Acre (according to weed growth stage)					
(including ALS- and triazine-resistant)	1/3 pints	2/3 pints	1 pints	1 1/8 pints	1 2/3 pints	2 pints
Amaranth, Palmer , Powell , Spiny	-	-	-	-	-	actively growing
Beebalm, Spotted	-	-	-	pre-bloom	post- bloom	-

Black Medic						
Broomweed	1-3"	3"	_	branching	_	after
2.00		branching		5.59		branching
Buckwheat, Wild	_	1-6"	_	_	_	-
Buffalobur	_	-	_	1-6"	_	flowering
Burdock	_	pre-flower	_	_	_	-
Buttercup	_	pre-flower	-	early bloom	late bloom	_
Carpetweed	_	-	_	-	-	actively
- Canpotine Ca						growing
Chickweed, Common	_	seedling	1-3"	_	-	-
Cockle, Cow	-	< 3"	-	-		
Cocklebur, Common	-	1-6"	6-12"	12-18"	-	-
Coreopsis, Plains	1-4"	1-6"	-	-		-
Croton, Woolly	-	4-12"	12-30"	-	-	-
Dogfennel	-	-	-	10-15"	)-	-
Evening Primrose	-	< 2"	-	2-6"	-	-
Flax	-	< 2"	4	1.	-	-
Fleabane, Annual	-	1-4"	4-8"	8"	-	
Fixweed	-	< 3"	-	-	-	
Henbit	-	-	pre-flower	-	flower	-
Knotweed Spp.	-	< 3"		> 3"	-	actively
11 11 11 11		runners		runners		growing
Kochia	-	1-6"	6-10"	10-20"	-	actively
	1					growing
Lambsquarters,	-	1-6"	6-10"	10-20"	-	actively
Common						growing
Mallow, Common	-	< 3"	-	-	-	-
Marestail (Horseweed)	-	-	-	-	-	actively
,						growing
Morning glory, Ivyleaf	-	pre-flower	-	-	-	-
, Tall	-	pre-flower	-	post-flower	-	-
Mustards, Annual		rosette		early bolt	-	-
, Tansy	-	< 3"			-	
Pennycress, Field	-	-	-	rosette	-	-
Pepperweed, Virginia	-	-	1-3"	3-6"	after	-
					branching	
Pigweed, Prostrate	-	< 3"	-	-	-	-
, Redroot	-	< 3"	3-10"	-	-	-
, Smooth	-	< 3"	-	-	-	-
, Tumble	-	< 3"	-	mature	-	-
Pineapple Weed	-	-	-	-	-	actively
						growing
Poorjoe	-	prior to	-	-	-	actively
		flower				growing
Puncturevine						actively

						growing
Purslane, Common		< 3"	3-8"		-	-
Ragweed, Common				>10"	-	
, Western , Lanceleaf	1-3"	3-6"	6-10"	actively growing	-	-
Rocket, London , Yellow	-	-	-	-	1	actively growing
Shepherdspurse	-	rosette	-	-	-	-
Smartweed, Pennsylvania	-	< 4"	-	-	4-12"	-
Sneezeweed, Bitter	-	1-4"	prior to flower	flower		
Sowthistle	-	rosette	-	bolting	-	-
Sunflower	-	1-3"	3-6"	6-24"	-	-
Thistle, Russian	-	-	-	rosette	<b>)</b> -	-
Velvetleaf	-	< 6"	6-20"	> 20"	-	-

<sup>&</sup>lt;sup>1</sup> For use in non-food/feed crop only. Adding crop oil concentrate has shown to improve performance on actively growing annual sedge.

Table 2. Application Rate and Timing – Biennial and Perennial Weeds

(The addition of liquid fertilizer (28-0-0, 32-0-0) at ½ the GPA of the spray solution has proven to give increase suppression or control on certain species of weeds.)

moreage suppression	Rate Per Acre (according to weed growth stage)					
Weeds Controlled	1/3 pints	2/3 pints	1 pints	1 1/8 pints	1 2/3 pints	2-3 1/4 pints
Bindweed, Field	-	-		-	-	actively growing
Bittercress	1	2-3"	-	•	-	ı
Black Locust	-	-	-	-	-	actively growing
Buckeye species	-	<b>)</b> -	-	-	full leaf	-
Bullnettle <sup>1</sup>	-	-	-	flower	-	-
Carrot, Wild	-	-	-	-	-	actively growing
Chickweed, Field , Mouseear	-	-	-	-	-	actively growing
Chicory	-	-	-	-	early bolting	-
Clove, Bur	-	-	pre-flower	-	-	-
Clover	1	-	-	1	-	actively growing
Dandelion, Common	ı	rosette	-	bolting	-	ı
Dewberry, Southern	-	-	-	-	-	spring or fall
Dock, Curly	-	-	prior to bolting	-	after bolting	-
Elderberry <sup>1</sup>	-	-	-	-	-	actively

						growing
Goldenrod, Missouri	-	-	-	3-15"	flower	-
Groundsel, Texas	-	rosette	post- bolting	-	-	-
Honeysuckle, Hairy	-	-	-	-	spring or fall	ı
Horsenettle, Carolina	-	-	-	-	-	flower or berry
Ironweed	-	-	-	-	-	actively growing
Ivy, Poison	-	-	-	after bloom		-
Knapweed, Black <sup>1</sup> , Russian <sup>1</sup> , Spotted	-	-	-	-		actively growing
Kudzu	-	-	-	-		actively growing
Marshelder	-	-	-	<12"	12"/prebloom	
Mesquite <sup>2</sup>	-	-	-	- 1	-	45-90 days after budbreak
Milkweed, Antelopehorn <sup>1</sup>	-	-	·	pre-flower	-	flower
Nettle, Stinging	-	-	-	-	-	actively growing
Nightshade, Silverleaf	-		(-)	full flower	-	-
, Black	-		-	full flower	-	actively growing
Persimmon, Eastern <sup>2</sup>	-	-	-	-	-	actively growing
Plantain, Broadleaf , Buckhorn	1	) -	-	-	-	actively growing
Poison Oak		-	-	-	-	actively growing
Prickly Lettuce	-	-	-	rosette	-	actively growing
Rabbitbrush <sup>1</sup>	-	-	-	-	-	-
Ragwort, Tansy	-	-	-	rosette	-	actively growing
Redvine <sup>1</sup>	-	-	-	-	-	actively growing
Russian Olive	-	-	-	-	-	actively growing
Sagebrush, Fringed <sup>1</sup>	-	-	-	-	-	actively growing
Smartweed	-	-	-	_	-	-
Sorrel, Red	-	-	rosette	bolting	flower	actively

						growing
Sowthistle <sup>1</sup>	-	-	-	-	-	actively
						growing
Spurge, Leafy <sup>1</sup>	-	-	-	-	-	full leaf
Tallow Tree,	-	-	-	-	-	-
Chinese <sup>3</sup>						
Teasel	-	-	-	-	-	actively
						growing
Thistle, Bull	-	-	rosette	bolting	-	actively
						growing
, Canada¹	-	ı	-	-	-	-
, Musk	-	-	-	rosette/bolting	-	-
, Plumeless	-	-	rosette	bolting	-	-
Toadflax, Dalmation	-	-	-	-		actively
						growing
Vetch, Hairy	-	1-4"	4-8"	8" full flower	-	-
Willow	-	-	-	-	-	actively
						growing
Yankeeweed	-	-	-	10-18"	-	rosette
Yarrow, Common	-	-	-	-	-	actively
						growing
Yellow Starthistle	-	-	-	-	-	-
4.00 1.00 1. 4 111						

<sup>&</sup>lt;sup>1</sup> Specified rate will provide top growth suppression only.

#### **Ground Application (Banding)**

Do not apply with a nozzle height greater than 4 feet above the crop canopy.

When applying **ON DECK™** herbicide by banding, determine the amount of herbicide and water volume needed using the following formula:

Bandwidth in inches x Broadcast rate = Banding herbicide Row width in inches per acre rate per acre

Bandwidth in inches x Broadcast rate = Banding water Row width in inches volume per acre volume per acre

#### **Ground Application (Broadcast)**

**Water volume:** Use 10-25 gallons of spray solution per broadcast acre for optimal performance. Use the higher spray volume when treating dense or tall vegetation.

**Application Equipment:** Select nozzle design to produce minimal amounts of fine spray particles. Spray nozzles as close to the weeds as is practical for good weed coverage.

<sup>&</sup>lt;sup>2</sup> For improved root kill or woody species such as mesquite and eastern persimmon spray 2 pints of per acre **ON DECK™** each year for 3 consecutive years.

<sup>&</sup>lt;sup>3</sup> Under dense populations, a second application may be needed the following growing season.

For increased control of weeds such as blackberry and dewberry, **ON DECK**<sup>TM</sup> may be tank mixed with Ally® herbicide (0.1-0.2 ounces per acre), if labeled for the use site.

#### **Spot or Small Area Application**

ON DECK<sup>™</sup> may be applied to individual clumps or small areas of undesirable vegetation using handgun or similar types of application equipment. Apply diluted sprays to allow complete wetting (up to runoff) of foliage and stems. For knapsack or other small capacity sprayers, prepare a solution of ON DECK<sup>™</sup> in water according to Table 3 (assuming that the spot treatment rate equates to 40 gallons per acre on the broadcast basis). Adding a surfactant (0.5% by volume) can help improve control.

Do not make spot treatments in addition to broadcast or band treatments.

**Application equipment:** Select nozzles designed to produce minimal amounts of fine spray particles. Spray with nozzles as close to the weeds as is practical for good weed coverage.

Table 3. – Knapsack Sprayer Dilution Instructions

Sprayer Capacity (gallons of water)	Amount of ON DECK™ to add to the spray tank
1 gallon	2/3 fluid ounce*
3 gallons	2 fluid ounces
5 gallons	3 fluid ounces

<sup>\* 1</sup> fluid ounce = 2 tablespoons

#### III. Additives

To improve burndown of emerged weeds, surfactants and/or low use rates of liquid fertilizers (28-0-0; 32-0-0), or crop oil concentrate may be used with **ON DECK™** herbicide or **ON DECK™** tank mixes applied after the weeds have emerged. Crop oil concentrate is for non-food/feed crop uses only. Do not apply tank mixes that include Ammonium Sulfate or Crop Oil Concentrate to any food/feed crop use listed on this label. For food/feed crop use, do not use liquid fertilizers that contain Ammonium Sulfate (AMS) as a source of nitrogen as tolerances in commodities derived from the crop may contain residues that exceed established tolerances.

#### Oil Concentrate

A crop oil concentrate must contain either a petroleum or vegetable oil base and must meet all of the following criteria:

- be non-phytotoxic
- provide good mixing quality in the jar test, and
- be successful in local experience

The exact composition of suitable products will vary; however, vegetable oil and petroleum oil concentrates should contain emulsifiers to provide good mixing quality. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils. For additional information, see Compatibility Test for Mix Components.

Adjuvants containing crop oil concentrates may be used for preplant, pre-emergence and between cropping applications. Do not use crop oil concentrate for postemergence applications <u>to</u> food/feed crops (i.e. sorghum, grass (hay or silage), pastures, rangeland, and wheat).

#### **Nitrogen Source**

**Sprayable liquid fertilizers:** Use ½ GPA of sprayable liquid fertilizers (28-0-0; 32-0-0) per acre. Do not use brass or aluminum nozzles when spraying fertilizers.

#### Non-ionic Surfactant

The standard label rates are 2-4 pints of an 80% active non-ionic spray surfactant per 100 gallons of water. (Rate will vary with the size and condition of weeds to be controlled. Use lowest rate per 100 gallons when weeds are small and actively growing. As weeds increase in size and or become hardened off, the rate of non-ionic surfactant will have to be increased to give optimum coverage and control.)

**Table 4. Additive Rate Per Acre** 

Additive <sup>1</sup>	Rate Additive Per Acre
Non-ionic Surfactant	2-4 pints per 100 gallons <sup>2</sup>
Sprayable Liquid Fertilizers (28-0-0; 32-0-0)	½ GPA of spray solution
Crop Oil Concentrate	1 quart

<sup>&</sup>lt;sup>1</sup> See manufacturer's label for specific rates.

#### IV. Tank Mixing Information

#### **Tank Mix Partners/Components**

The following products may be tank mixed with **ON DECK™** according to the specific tank mixing instructions in this label and respective product labels.

- Aim™ (carfentrazone-ethyl)
- Ally® (metsulfuron-methyl)
- Amber® (triasulfuron)
- Asulox® (asulam)
- Atrazine
- Banvel® (dicamba)\*
- Basagran® (bentazon)
- Bronate® (bromoxynil + MCPA)
- Buctril® (bromoxynil)
- Canvas® (thifensulfuron-methyl + tribenuronmethyl + metsulfuron-methyl)
- Clarity® (dicamba)\*
- Curtail<sup>™</sup> (clopyralid + 2,4-D)
- Cyclone® (paraguat)
- Dakota® (fenoxaprop-p-ethyl + MCPA)
- Dicamba DMA (dicamba)\*
- Distinct® (diflufenzopyr + dicamba)\*
- Evik® (ametryn)
- Express® (tribenuron-methyl)
- Fallowmaster® (glyphosate + dicamba)\*
- Fallow Star™ (glyphosate + dicamba)\*
- Finesse® (chlorsulfuron + metsulfuron-methyl)

- Gly Star™ Plus (glyphosate)
- Gramoxone® Extra (paraquat)
- Grazon™ P+D (picloram + 2,4-D)\*
- Harmony® Extra (thifensulfuron-methyl + tribenuron-methyl)
- Karmex® (diuron)
- Kerb<sup>™</sup> (pronamide)
- Laddok® S-12 (bentazon + atrazine)\*
- Landmaster® (glyphosate + 2,4-D)\*
- MCPA
- Paramount® (quinclorac)
- Peak® (prosulfuron)
- Permit® (halosulfuron-methyl)
- Rave™ (dicamba + triasulfuron)\*
- Roundup® Ultra (glyphosate)
- Sencor® (metribuzin)
- Sinbar® (terbacil)
- Stinger™ (clopyralid)
- Tiller® (fenoxaprop-p-ethyl + 2,4-D + MCPA)\*
- Tordon™ (picloram)
- Touchdown® (glyphosate)
- 2,4-D\*

<sup>&</sup>lt;sup>2</sup> Use lowest rate per 100 gallons when weeds are small and actively growing. As weeds increase in size and or become hardened off, the rate of non-ionic surfactant will have to be increased to give optimum coverage and control.

#### • Glean® (chlorsulfuron)

\*When tank mixing with products that contain either 2,4-D or dicamba, do not exceed the annual per acre application rate for each active ingredient for that crop.

See "VI. Food/Feed Crop Specific Information" section for more information for more details. Read and follow the applicable Restrictions and Limitations and Directions for Use on all products involved in tank mixing. Physical incompatibility, reduced weed control, or crop injury may result from mixing **ON DECK™** with other pesticides (fungicides, herbicides, insecticides, or miticides), additives, or fertilizers. Therefore always determine compatibility before tan mixing this product with any other pesticide. 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 accordingly. Only use water from the intended source at the source temperature.

Add components in the sequence indicated in the Mixing Order using 2 teaspoons for each pound or 1 teaspoon for each pint of specified label rate per acre.

Always cap the jar and invert 10 cycles between component additions.

When the components have all been added to the jar, let the solution stand for 15 minutes. Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor 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 still incompatible, do not mix the ingredients in the same tank.

**Mixing Order:** If an inductor is used, rinse it thoroughly after each component has been added. Maintain constant agitation during application.

- 1. Water. Begin by agitating a thoroughly clean sprayer tank half full of clean water.
- 2. Agitation. Maintain constant agitation throughout mixing and application.
- Products in PVA bags. Place any product contained in water-soluble 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-dispersible products (such as dry flowables, wettable powders, suspension concentrates, and suspo-emulsions)
- 5. Water-soluble products (such as **ON DECK**™).
- 6. Emulsifiable concentrates (such as oil concentrate, when applicable).
- 7. Water-soluble additives (such as liquid fertilizers (28-0-0; 32-0-0), when applicable).\*
- 8. Remaining quantity of water.

Always perform the Compatibility Test before mixing into the spray tank. Also, when using a sprayable fluid fertilizer as the carrier, any product contained in PVA bags must first be completely dissolved in water before the contents can be added to the fertilizer mix.

<sup>\*</sup> If sprayable fluid fertilizer is used as the carrier.

#### V. Restrictions and Limitations

- Maximum seasonal use rate: Refer to Table 5.
- Do not make more than two applications per season regardless of individual application rates
- Preharvest Interval (PHI): Refer to "Food/Feed Crop Specific Information"
- Restricted entry Interval (REI): 48 Hours

#### **Crop Rotational Restrictions:**

The interval between application and planting rotational crop is given below. Always exclude counting days when the ground is frozen. Planting at intervals less than specified below may result in crop injury. Moisture is essential for the degradation of this herbicide in soil.

Planting/replanting restrictions for **ON DECK™** applications of 3 2/3 pints per acre or less: No rotational cropping restrictions apply at 120 days or more following application. Additionally, for annual crop uses in this label including sorghum, follow the preplant use directions under "VI. Food/Feed Crop Specific Information." For barley, oat, wheat, and other grass seedlings, the interval between application and planting is 10 days per 2/3 pint per acre.

Planting/replanting restrictions for applications of more than 3 2/3 pints and up to 4 3/4 pints of **ON DECK™** per acre: Corn, sorghum, and all other crops grown in areas with 30" or more of annual rainfall may be planted 120 days or more after application. Barley, oat, wheat and other grass seedlings may be planted, if the interval from application to planting is 10 days per 2/3 pint per acre east of the Mississippi River and 15 days per 2/3 pint per acre west of the Mississippi River. For all other crops in areas with less than 30" of annual rainfall, the interval between application and planting is 180 days or more.

Do not plant cotton for at least 30 days after application and after allowing for a minimum accumulation of 1" rainfall or overhead irrigation.

- Arid (dry) conditions: It is extremely important that the addition of a suitable Nonionic Surfactant, Oil, or sprayable fertilizer be used when applying ON DECK™. Higher rates of ON DECK™ may be needed to control susceptible weeds in this environment.
- Rainfast Period: Rainfall or irrigation occurring within 4 hours after postemergence applications may reduce effectiveness of **ON DECK™**.
- Stress: Do not apply to crops under stress such as stress due to lack of moisture, hail damage, flooding, herbicide injury, mechanical injury, or widely fluctuating temperatures, as unsatisfactory control may result.
- Do not apply to crops that show injury (leaf phytotoxicity or plant stunting) produced by any other prior herbicide applications, because this injury may be enhanced or prolonged.
- Do not apply this product though any type of irrigation equipment. Do not contaminate irrigation ditches or water used for domestic purposes.
- Do not apply more than 8 pints per application and no more than 2 applications per year.

Table 5. Crop Specific Restrictions and Limitations

Crop	Maximum Rate Per Acre Per Application	Maximum Rate Per Acre Per Season	Livestock Grazing or Feeding <sup>1</sup>	Aircraft Application
Between Crop Applications <sup>2</sup>	3 2/3 pints	4 3/4 pints	Yes	Yes
Pasture, Hay, Silage	2 1/2 pints	4 3/4 pints	Yes	Yes
Sorghum	2/3 pints	2/3 pints	Yes	Yes
Wheat	2 pints	4 pints	Yes	Yes

<sup>&</sup>lt;sup>1</sup> Refer to "Food/Feed Crop Specific Information" for grazing and feeding restrictions.

### VI. Non-Food/Feed Use (Land not Harvested, Grazed or Foraged) – Specific Information FOREST MANAGEMENT

#### **Forest Site Preparation**

**Budbreak Spray:** For control of alder, susceptible broadleaf weeds, and susceptible woody plants before planting forest seedlings, apply up to 2 quarts per acre in a minimum of 10 gallons spray mixture per acre. Apply as an oil spray (see "Mixing Instructions") after alder buds break, but before foliage is 1/4 full size. A water spray including 2 to 4 quarts per acre of diesel oil, fuel oil, stove oil, or crop oil concentrate may also be used.

**Foliage Spray:** To control alder and susceptible woody plants before planting forest seedlings, apply up to 4 pints per acre in a minimum of 10 gallons spray mixture per acre. If desired, apply as a water spray including up to 1 quart of diesel oil, fuel oil, stove oil, or crop oil concentrate per gallon of water (see "Mixing Instructions"). For best results, apply after alder foliage has reached full size.

Conifer Release: Some Conifers are more susceptible to ON DECK™ than others. To control alder, susceptible broadleaf weeds, and susceptible woody plants in young conifer stands, apply up to 2 pints per acre in a minimum of 10 gallons spray mixture per acre. This spring foliage treatment should be applied as a water spray when 3/4 of the brush foliage has full size leaves and before new conifer growth reaches 2 inches in length. Such stages usually occur between early May and mid-June, but application timing should be based on growth stages of brush and conifers. Application may cause leader deformation and other conifer injury, but trees should overcome it during the next growing season.

To control tanoak, madrone, ceanothus, canyon live oak, and manzanita, and to release Douglas fir, hemlock, Sitka spruce or grand fir, apply up to 3 pints per acre in a minimum of 10 gallons spray mixture per acre. This spring foliage treatment should be applied as a water spray including, if desired, up to 1 quart of diesel oil, fuel oil, stove oil, or crop oil concentrate per gallon of water (see "Mixing Instructions"). Make application before new growth on Douglas fir is 2 inches long. To release ponderosa pine from the same species, treat before new pine growth begins in the spring. Addition of oil or oil concentrate may cause unacceptable injury to pines. For dormant applications in late winter or early spring for control of susceptible woody species such as alder, willow, poplars, cherry, vine maple, ceanothus, tanoak, madrone,

<sup>&</sup>lt;sup>2</sup> Postharvest, Fallow, Crop Stubble and Set-Aside for broadleaf weed control. Refer to Restrictions & Limitations in Section V for possible crop rotational restrictions.

and manzanita, apply up to 3 pints per acre in a minimum of 10 gallons spray mixture (with diesel oil, etc.) per acre. This dormant treatment should be applied in diesel oil, fuel oil, stove oil, or other suitable diluent such as water plus crop oil concentrate (see "Mixing Instructions"). Do not use in plantations where pine and larch are among the desired crop species.

To control hazel dodder (*Cuscuta coryli*) in the Lake states, apply up to 2 pints per acre in a minimum of 10 gallons spray mixture per acre. Apply as a water spray when new shoot growth of hazel is complete (usually mid-July).

After conifer species such as white pine, ponderosa pine, jack pine, red pine, black spruce, white spruce, red spruce, and balsam fir crease growth and harden off and brush is still actively growing in late summer, apply up to 3 pints per acre in a minimum of 10 gallons water spray mixture per acre. Apply as a water spray to control certain competing hardwoods such as alder, aspen, birch, hazel and willow. However, if possible injury cannot be tolerated, do not use since this treatment may cause conifer injury.

**Forest Roadsides:** To control susceptible broadleaf weeds and woody plants on forest roadsides, apply 1 to 3 pints per acre in a minimum of 10 gallons water spray mixture per acre. Apply as a water spray and, if necessary to ensure penetration of foliage, include up to 3 quarts per acre of diesel oil, fuel oil, stove oil, or crop oil concentrate (see "Mixing Instructions").

#### FOREST MANAGEMENT RESTRICTIONS:

- Do not apply under drip line of desirable trees or adjacent to desirable vegetation.
- Maximum: 1 application per year.
- Do not apply more than 1 gallon of product per acre per year.

# ROADSIDES; MEDIANS; HIGHWAY, RAILROAD, UTILITY AND PIPELINE RIGHTS-OF-WAY; VACANT LOTS; AROUND UTILITY INSTALLATIONS, TRANSFORMERS, PUMP HOUSES, AND BUILDINGS; STORAGE AREAS; FENCES; GUARDRAILS; LUMBER YARDS; INDUSTRIAL SITES; AIRPORTS; TANK FARMS; FARMSTEADS; AND SIMILAR NONCROP AREAS

For control of many broadleaf weeds and small woody plants, apply 2/3 to 2 pints per acre diluted in 10 gallons of water. Use the high rate for woody plants. Applications may be as broadcast sprays, small area sprays or spot treatments. For small areas or spot spraying, use 2 fluid ounces per gallon of water and spray weeds to runoff. Regardless of the method of application, use adequate spray volume for full coverage of weeds. Preferred application timing is in the early spring when sufficient weeds have emerged, and when weeds are small and actively growing, but before weeds exceed size limits described in weed tables. Summer applications to older, drought-stressed weeds are less effective. However, weeds are more susceptible again in the fall when cooler, wetter conditions support active growth before a killing frost. For fall treatment of mature weeds or perennial weed regrowth, use up to 1.0 pints per acre diluted in 10 gallons of water. Several seasons of spring plus fall treatments may be necessary to control certain perennials. Use of oil sprays or the addition of spray adjuvants improves weed control, but also increases the risk of damage to desirable ground covers.

#### **Precautions:**

**Plant Response:** Bent grass, other warm season or southern grasses, alfalfa, clover, or other legumes may be killed or injured. Reseeding is not recommended for at least 30 days following application.

#### NONCROP USE RESTRICTIONS:

- Do not apply under drip line of desirable trees or adjacent to desirable vegetation.
- Do not apply when grass is in boot to milk stage, or after heading begins, if grass production is desired.
- Do not apply to newly seeded areas until grass is well established.

#### CONSERVATION RESERVE PROGRAMS AND GENERAL FARMSTEAD

**ON DECK™** is recommended for use for Conservation Reserve Programs, general farmstead (non-cropland only), weed and brush control, or use in State Recognized Noxious Weed areas (non-cropland areas).

Refer to Tables 1 and 2 for rate selection based on targeted weed or brush species. Some weed species will require tank mixes for adequate control.

#### **RESTRICTIONS:**

- Do not make more than 2 applications per year. Minimum of 30 days between applications.
- Rates above 2 1/2 pints of ON DECK™ per acre are for spot treatments only.
- Retreatments may be made as needed; however, do not exceed a total of 4 3/4 pints of ON DECK™
  per treated acre during a growing season.

#### FARMSTEAD AND FENCE-ROW TREATMENT APPLICATION INSTRUCTIONS

**ON DECK™** may be applied using water or oil and water emulsions in spot application to control undesirable vegetation using handgun or similar types of application equipment. In addition to weed species listed in Tables 1 and 2, these treatments may be used to control or suppress woody plant species listed in Table 6.

To prepare soil and water emulsions, mix in the order and proportions indicated below.

- 1. **Water:** Begin by agitating a thoroughly clean sprayer tank with the desired quantity of clean water. Maintain constant agitation during complete mixing procedure.
- 2. **Emulsifier:** Add 0.5% volume to volume of water.
- 3. **ON DECK™:** Add 1.5 gallons per 100 gallons of total intended solution.
- 4. **Diesel Oil:** Add 10 gallons per 100 gallons of total intended solution.

One gallon of **ON DECK™** in forty gallons of spray solution contains 1.0 pounds acid equivalent of dicamba and 2.3 pounds acid equivalent of 2,4-D. Spray plants to wet.

The solution should remain milky colored without an oily layer on top when under agitation. If an oily layer forms, increase the amount of emulsifier or change to a more effective emulsifier.

To control brush, briars, and weeds along fence-rows surrounding pasture and ranch lands, and fallow fields, use a tank mix of 1.5% **ON DECK™**, 88.5% water, 10% diesel oil, and sufficient emulsifier (to mix the diesel and emulsifier). The diesel oil in this tank mix will damage or kill desirable grasses and should not be used in pastures or where damage to desirable species cannot be tolerated.

Maintain constant agitation during application. Under good agitation, the spray solution should be milky white with no oil layer on top. If oil layer forms, increase the amount of emulsifier or change to a more effective emulsifier.

#### FOR SPRAYING FOLIAR APPLICATIONS:

- 1. Spray when leaves have reached full size but have not hardened due to drought or maturity.
- 2. Spray individual plants to wet with handgun.
- 3. For larger stems (up to 3" in diameter) and hard to control species, direct spray stream to base of stems to wet the stem at soil surface in addition to wetting the foliage.
- 4. Do not apply under drip line of desirable trees or adjacent to desirable vegetation.

#### FOR DORMANT BASAL APPLICATIONS:

- 1. Increase diesel oil content to 15% or 15 gallons of diesel oil per 100 gallons of total solution.
- 2. Spray in late winter and early spring before plants break dormancy.
- 3. Spray the bottom 24" of the target stem to wet on all sides.
- 4. For larger stems (up to 3" in diameter) and hard to kill species direct the spray solution to the base of target stems to wet the soil at the stem/soil junction in addition to wetting the stem.

#### FOR CUT SURFACE TREATMENTS:

Apply **ON DECK™** in an undiluted state as a cut surface treatment to control unwanted trees and prevent sprouts of cut trees.

- Frill or Girdle Treatments: Make a continuous cut or a series of overlapping cuts using an axe to girdle tree trunk. Spray or paint the cut surface with ON DECK™.
- **Stump Treatments:** Spray or paint freshly cut surface with **ON DECK™**. The cambium layer (the area adjacent to the bark) should be thoroughly wet. Treat stumps within 6 hours after cutting.
- Basal spray, Cut Surface (stumps and frill): Limit of one basal spray or cut surface application per year. Maximum of 8.0 lbs a.i. per 100 gallons of spray solution.

Table 6. The following list of trees and vines can be controlled on farmsteads and fencerows as foliar, basal, or cut surface treatments:

Alder	Hemlock	Poplar
Ash	Hickory	Rabbitbrush
Aspen	Honeylocust	Redcedar, Eastern
Basswood	Honeysuckle	Rose, McCartney
Beech	Hornbeam	Rose, Multiflora
Blackberry	Huckleberry	Sagebrush, Fringe
Blackgum	Huisache	Sassafras
Cedar	Ivy, Poison	Spruce
Cherry	Kudzu	Sumac
Chinquapin	Locust, Black	Sweetgum
Cottonwood	Maple	Sycamore
Creosotebush	Mesquite	Tarbrush
Dewberry	Oak	Willow
Dogwood	Oak, Poison	Witchhazel
Elm	Olive, Russian	Yaupon
Grape	Persimmon, Eastern	Yucca
Greenbriar	Pine	
Hawthorn (Thornapple)	Plum, Sand (Wild Plum)	

#### RESTRICTIONS:

- Do not exceed 40 gallons of spray solution per treated acre per application.
- Do not allow this spray mix to contact desirable vegetation.
- Do not apply under drip line of desirable trees or adjacent to desirable vegetation.

#### **SOD FARMS**

For best results, do not mow turf 1 to 2 days before or after application. Turf watering should be delayed until the day after application. Do not apply to newly seeded areas until grass is well established and has been mowed several times. A period of about 30 days after application is usually a sufficient interval before reseeding. Seeding a small area and observing response is recommended before large scale seeding.

#### **COOL SEASON GRASSES:**

To control many emerged broadleaf weeds in cool season turfgrasses such as tall fescue, bluegrass, or perennial ryegrass, apply 1.0-4.0 pints per acre. Apply when weeds are small and actively growing under good moisture conditions.

Use sufficient spray solution for thorough and uniform coverage, and no less than 2 gallons per acre.

#### **COOL SEASON GRASS RESTRICTIONS:**

- Do not use on creeping grasses such as bentgrass except as a spot treatment.
- Do not use on dichondra or other herbaceous ground covers. Legumes may be damaged or killed.
- **Reseeding:** Delay reseeding at least 30 days following application. Preferably, with spring application, reseed in the fall and with fall application, reseed in the spring.
- Do not use on carpetgrass, bentgrass, or Dichondra turf, or where desirable clovers are present.

#### **WARM SEASON GRASSES:**

To control many broadleaf weeds in warm season turfgrasses such as common bermudagrass, hybrid bermudagrass, bahiagrass, zoysiagrass, buffalograss, centipedegrass, seashore paspalum, or kikuyugrass, apply up to 1.5 pints per acre. Apply when weeds are small and actively growing under moist conditions.

To control many broadleaf weeds in common St. Augustine, apply up to 1.5 pints per acre. Apply when weeds are small and actively growing under moist conditions.

#### St. Augustine Precautions:

- If dry conditions exist, irrigation 8 hours before and 8 hours after application is recommended.
- Avoid moving 2 days before and until 2 days after the application of this product.
- Over application of this product can cause turf injury (discoloration, turf thinning, stunting and even turf death).
- To avoid turf injury, use only on turfgrass that is reasonably free of stress from diseases, insects, excess heat or cold, drought or excess rainfall/irrigation, shaded areas, low soil pH, nematodes, improper mowing or improper applications of fertilizer and pesticides. Injury can occur if this product is applied under any of these or other stress conditions. Under any of these stress conditions, any turf damage caused by the use of this product is beyond the control of Albaugh and all risk is assumed by the buyer and/or user.

• If any discoloration is objectionable or any level of phytotoxicity would be unacceptable, then surfactants and other adjuvant(s) combined with **ON DECK™** are not recommended.

#### WARM SEASON RESTRICTIONS:

- Do not apply this product to 'Floratam', 'Bitterblue' and other improved varieties of St. Augustinegrass.
- Do not broadcast or spot apply this product to St. Augustinegrass during spring green-up, which is the transition period between dormancy and active growth.
- Do not broadcast or spot apply this product to St. Augustinegrass during the fall to winter transition or if temperatures are expected to drop below 40°F within ten (10) days of application
- Do not broadcast apply this product when ambient temperatures are below 50°F or above 85°F; some injury may be expected with spot treatments when air temperatures exceed 85°F.
- Do not use tank mixture combinations; unless your experience indicates that the tank mixture will not result in turf injury.

#### **SOD FARM RESTRICTIONS (Warm and Cool Season Use):**

- Do not make more than 2 applications per year (excluding spot treatments).
- Do not apply more than 4 pints product (1.2 lbs 2,4-D ae) per acre per application on cool season grass varieties.
- Do not apply more than 1.5 pints product per acre per application on warm season grass varieties.
- Minimum spray interval between broadcast applications is 21 days.
- **ON DECK™** contains 0.29 pounds a.e. of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 4.0 pounds of a.e. per acre per year excluding spot treatments.

## ORNAMENTAL AND RECREATIONAL TURFGRASSES, LAWNS, GOLF COURSES (Fairways, Aprons, Tees, and Roughs), PARKS AND CEMETERIES

Refer to "Turf Use Requirements" in the "Non-Agricultural Use Requirements" section. For best results, do not mow turf 1 to 2 days before or after application. Turf watering should be delayed for at least 1 hour after application. Avoid contacting desirable trees, shrubs, flowers or vegetables since plant injury may result. Do not apply to newly seeded areas until grass is well established and has been mowed several times. A period of about 30 days after application is usually a sufficient interval before reseeding grasses (or other plants). Seeding a small area and observing response is recommended before large scale seeding.

#### **COOL SEASON GRASSES:**

To control many emerged broadleaf weeds in cool season turfgrasses such as tall fescue, bluegrass, or perennial ryegrass, apply 2.0-3.0 pints per acre (0.75 to 1.0 fluid ounces per 1,000 square feet). Preferred application timing for broadcast treatment is in the early spring when small weeds have emerged and are actively growing under good moisture conditions. For very weedy turf, a follow-up broadcast or spot application may be needed from 2 to 4 weeks later. Summer applications are typically spot treatments of individual weeds that have emerged after a spring broadcast treatment. In the fall when cooler, wetter conditions favor active weed growth, broadcast application may be appropriate for very weedy turf, such as an area that had no spring broadcast treatment.

#### WARM SEASON GRASSES:

To control many broadleaf weeds in warm season turfgrasses such as common bermudagrass, hybrid bermudagrass, bahiagrass, zoysiagrass, buffalograss, centipedegrass, seashore paspalum, or

kikuyugrass, apply up to 1.5 pints per acre. Apply when weeds are small and actively growing under moist conditions.

Do not use where desirable clovers are present.

To control many broadleaf weeds in common St. Augustine, apply up to 1.5 pints per acre. Apply when weeds are small and actively growing under moist conditions.

#### St. Augustine Precautions:

- If dry conditions exist, irrigation 8 hours before and 8 hours after application is recommended.
- Avoid moving 2 days before and until 2 days after the application of this product.
- Over application of this product can cause turf injury (discoloration, turf thinning, stunting and even turf death).
- To avoid turf injury, use only on turfgrass that is reasonably free of stress from diseases, insects, excess heat or cold, drought or excess rainfall/irrigation, shaded areas, low soil pH, nematodes, improper mowing or improper applications of fertilizer and pesticides. Injury can occur if this product is applied under any of these or other stress conditions. Under any of these stress conditions, any turf damage caused by the use of this product is beyond the control of Albaugh and all risk is assumed by the buyer and/or user.

#### St. Augustine Restrictions:

- Do not apply this product to 'Floratam', 'Bitterblue' and other improved varieties of St. Augustinegrass.
- Do not broadcast or spot apply this product to St. Augustinegrass during spring green-up, which is the transition period between dormancy and active growth.
- Do not broadcast or spot apply this product to St. Augustinegrass during the fall to winter transition or if temperatures are expected to drop below 40°F within ten (10) days of application
- Do not broadcast apply this product when ambient temperatures are below 50°F or above 85°F; some injury may be expected with spot treatments when air temperatures exceed 85°F.
- Do not use tank mixture combinations; unless your experience indicates that the tank mixture will not result in turf injury.

#### **ORNAMENTAL TURFGRASS RESTRICTIONS:**

- Do not apply more than 4 pints product (1.2 lbs 2,4-D ae) per acre per application on cool season grass varieties.
- Do not apply more than 1.5 pints product per acre per application on warm season grass varieties.
- Do not make more than 2 applications per year (excluding spot treatments).
- Minimum spray interval between broadcast applications is 30 days.
- **ON DECK™** contains 0.29 pounds a.e. of 2,4-D per pint. When tank mixing with products that contain 2,4-D, do not exceed a combined total of 3.0 pounds of a.e. per acre per year excluding spot treatments.

#### Weeds listed in this label:

Weeds listed in this label:	Scientific Name
Common Name	
ANNU	
Beebalm, Spotted	Monarda punctata
Broomweed, Common	Gutierezia dracunculoides
Buckwheat, Wild	Polygonum convulvulus
Buffalobur	Solanum rostratum
Burdock	Arctium spp.
Buttercup, Corn	Rannculus arvensis
Chickweed, Common	Stellaria media
Cockle, Corn	Agrostemma githago
Cocklebur, Common	Xanthium strumarium
Coreopsis, Plains	Coreopsis tinctoria
Croton, Woolly	Croton capitatus
Devilsclaw,	Proboscidea luisianica
Dogfennel (Cypressweed)	Eupatorium capillifolium
Eveningprimrose, Cutleaf	Oenothera lacinata
Flax	Linum catharticum
Fleabane, Annual	Erigeron annuus
Flixweed	Descurainia sophia
Henbit	Lamium amplexicaule
Knotweed, Prostrate	Polygonum aviculare
Kochia	Kochia scoparia
Lambsquarters, Common	Chenopodium album
Lettuce, Prickly	Lactuca serriola
Mallow, Common	Maalva neglecta
Morningglory, Ivyleaf	Ipomea hederacea
, Tall	Ipomea purupurea
Mustard, Annual	Brassica spp.
, Tansy	Descurainia pinnata
Pennycress, Field	Thlaspi arvense
Pepperweed, Virginia	Lepidium virginicum
Pigweed, Prostrate	Amaranthus blitoides
, Redroot	Amaranthus retroflexus
, Smooth	Amaranthus hybridus
, Tumble	Amaranthus albus
Poorjoe	Diodia teres
Purslane, Common	Portulaca oleracea
Ragweed, Common,	Ambrosia ariemisiifolia
, Lance-leaf	Ambrosia bidentata
, Western	Ambrosia psilostachya
Sedge	Cyperus compressus
Shepherdspurse	Capsella bursa-pastoris
Smartweed, Pennsylvania	Polygonum pensylvanicum
Sneezeweed, Bitter	Helenium amurum
Sunflower, Common (wild)	Helianthus annuus

Thistle, Russian	Salsola iberica
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Common Name	Scientific Name
	O PERENNIALS
Bindweed, field	Convolvulus arvensis
Bittercress	Cardamine spp.
Buckeye	Aesculus spp.
Bullnettle	Cnidosculus stimulosus
Chicory	Cichorium intybus
Clover, Hop	Trifoleum aureum
Dandelion	Taraxacum officinale
Dock, Curly	Rumex crispus
Elderberry	Sambucus canadensis
Goldenrod, Missouri	Solidago missouriensis
Goldenweed, Common	Iscoma coronopifolia
Groundsel	Senecio vulgaris
Honeysuckle, Hairy	Lonicera
Horsenettle	Solanum caroliniense
Ivy, Poison	Rhus radicans
Knapweed, Black	Centaurea nigra
, Russian	Centaurea repens
, Spotted	Centaurea maculosus
Marshelder	Ina annua
Mesquite	Prosopis juliflora
Milkweed, Antelopehorn	Asciepius
Nightshade, Silverleaf	Solanum elaeagnifolium
, Black	Solanum nigrum
Persimmon, Eastern	Diospyros virginiana
Rabbitbrush	Chrysanthemus pulchellus
Ragwort, Tansy	Senecio jacobia
Redvine	Brunnichia ovata
Sagebrush, Fringed	Artemisia frigida
Smartweed, Swamp	Polygonum coccineum
Sorrel, Red (Sheep Sorrel)	Rumex acetosella
Sowthistle, Perennial	Sonchus arvensis
Spurge, Leafy	Euphorbia esula
Starthistle, Yellow	Centauria solstitialis
Tallow Tree, Chinese	Sapium sebiferum
Thistle, Bull	Cirsium vulgare
, Canada	Cirsium arvense
, Musk	Carduus nutans
, Plumeless	Carduus acanthoides
Vetch	Vicia spp.
Yankeeweed	Eupatorium compositifolium

### Food/Feed Crop Uses This product can be used on the following:

- General Farmstead
- Industrial Sites
- Rights-of-way
- Roadsides
- Non-crop Areas

- Sod Farms
- Ornamental & Recreational Turf

Look inside for complete Restrictions and Limitations and Application Instructions.

These crops are considered Food/Feed crops only when harvested, grazed, or foraged. Otherwise, they are considered non-Food/Feed uses.

#### 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 should be followed carefully. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions or presence of other materials. All such risks shall be assumed by the Buyer.

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