

CLICK HERE TO JUMP TO USE DIRECTIONS



# HI-DEP® IVM

## BROADLEAF HERBICIDE

*Especially formulated for low volume applications with aerial and ground equipment.*

**ACTIVE INGREDIENTS:**

- Dimethylamine salt of 2,4-dichlorophenoxyacetic acid . . . . . 33.2%
- Diethanolamine salt of 2,4-dichlorophenoxyacetic acid . . . . . 16.3%

**INERT INGREDIENTS:** . . . . . 50.5%  
TOTAL 100.0%

**This Product Contains:**

3.8 lbs. 2,4-dichlorophenoxyacetic acid equivalent per gallon or 38.6%.  
Isomer Specific by AOAC Methods.

### KEEP OUT OF REACH OF CHILDREN

## 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 to you in detail.)

See below for additional Precautionary Statements and First Aid.

### KEEP FROM FREEZING



**READ THE ENTIRE LABEL FIRST. OBSERVE ALL USE PRECAUTIONS AND FOLLOW DIRECTIONS CAREFULLY.**

### PRECAUTIONARY STATEMENTS

**Hazards To Humans And Domestic Animals:**

**DANGER:** Corrosive. Causes eye damage and skin irritation. Do not get in eyes, on skin or on clothing. Harmful if swallowed, absorbed through skin or inhaled. Avoid breathing vapor or spray mist.

**Personal Protective Equipment (PPE):**

Applicators and other handlers must wear long-sleeved shirt and long pants, waterproof gloves, shoes plus socks, and protective eyewear.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. After each day of use, clothing or PPE must not be reused until it has been cleaned.

**Engineering Control Statements:**

**Containers over 1 gallon and less than 5 gallons in capacity:** 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.

**Containers of 5 gallons or more in capacity:** Do not open-pour from this container. A mechanical system (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.

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.

**User Safety Recommendations:**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing 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.

### First Aid

<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If inhaled:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
<b>NOTE TO PHYSICIAN:</b> Probable mucosal damage may contraindicate the use of gastric lavage.	

**ENVIRONMENTAL HAZARDS:**

To prevent injury to susceptible crops and other desirable plants including but not limited to cotton, tomatoes, garden crops, and ornamentals, avoid contact with the spray solution, spray droplets, and spray mist (fine droplets). Applications are recommended only when there is no potential hazard from spray drift during dormant and active growth periods. Use coarse spray droplets, follow the recommendations of the equipment manufacturers, and apply when the wind velocity is less than 10 mph. Always check the spray tank and equipment for cleanness before preparing the spray solution. To avoid subsequent injury to crops other than the use site, immediately clean the spray equipment and dispose the rinsates according to label instructions. Avoid contamination of water supplies that may be used to irrigate or water susceptible crops, or to be used for domestic purposes.

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater.

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.

### 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.

### 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 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.

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, wear: coveralls, waterproof gloves, shoes plus socks, and protective eyewear.

### 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.

Reentry statement for residential and other turf sites excluding sod farms. Do not allow people (other than applicator) or pets on treatment area during application. Do not enter treatment area until spray has dried or dust has settled.

### STORAGE & DISPOSAL

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

**STORAGE:** Store in original container in a locked storage area inaccessible to children or pets. Keep from freezing.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. 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: FOR PLASTIC CONTAINER** – Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities by burning. If burned stay out of smoke. **FOR METAL DRUMS** – Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

### PRECAUTION FOR PAINTS AND COATINGS OF AUTOMOBILES AND OTHER VEHICLES:

Undiluted spray droplets may damage the paint, coating, or finish of vehicles. Vehicles should not be sprayed. If accidental exposure does occur, then the vehicle should be washed before the spray droplets dry.

### NOTICE TO USER:

This product must be applied in compliance with the pesticide regulations of the state in which application is made. Check with local authorities regarding regulations which may affect the application of this product.

### SPRAY EQUIPMENT:

Hi-Dep® IVM consists of the dimethylamine and diethanolamine salts of 2,4-D especially formulated for low volume applications with aerial and ground equipment. For all methods of application, apply the spray solution in properly maintained and calibrated equipment capable of delivering the desired spray volumes. Follow the spray equipment manufacturer's directions for cleaning, adjusting pressure, and selecting appropriate nozzles.

### Aerial application:

Ready-to-use, not necessary to dilute for application rates of ½ gallon (2 quarts) per acre or higher. For rates lower than ½ gallon, dilute with water for a total solution per acre of not less than ½ gallon.

### Aircraft specifications (fixed wing or rotary wing):

Boom width should not exceed ¾ the length of the aircraft wingspan. Do not exceed 25 psi nozzle pressure. Number of nozzles required to obtain desired volume per acre is dependent on swath width and speed of aircraft. Nozzles should be positioned between 135° and 175° from direction of flight for fixed wing. DO NOT APPLY THROUGH BECOMIST NOZZLE SYSTEMS. Maintain aircraft altitude of 10 to 12 feet during application. See manufacturer's technical bulletin regarding nozzles and method of application specifications.

### Ground application:

Use conventional power spray equipment fitted with a boom, off-center nozzles, or spray gun for broadcast and spot treatments with high volume and low volume foliar applications. Spray equipment may range from an engine driven pump system (e.g. tractor, truck, trailer, all terrain vehicle ATV, wet-blade mowers) to self propelled sprayers.

Backpack sprayers, knapsack sprayers, compression sprayers, and hand operated sprayers are appropriate for foliar applications and low volume directed spray applications (basal bark, stem applications).

**WEEDS CONTROLLED** - Use Hi-Dep® IVM to control many broadleaf weeds including:

#### – PERENNIAL WEEDS –

Artichoke	Dogfennel	Rush, slender
Aster	Goldenrod	Sowthistle
Austrian fieldcress	Ground ivy	St. Johnswort
Bindweed	Healall	Stinging nettles
Blackeyed Susan	Hemlock	Strawberry (wild)
Blue lettuce	Ironweed	Tall buttercup
Canada thistle	Leafy spurge	Tanweed
Catnip	Knapweed (Spotted)	Toad flax
Chicory	Russian Diffuse)	Vervains
Clover (many types)	Locoweed	Whitetop (Hoary cress)
Coffeeweed	Mugwort	Wild garlic
Dandelion	Nettles	Wild onion
Docks	Orange hawkweed	Wild sweet potato
Dogbane	Povertyweed	Yellow rocket

#### – ANNUAL AND BIENNIAL WEEDS –

Beggarticks	Henbit	Primrose
Bitterweed	Jewelweed	Puncturevine
Black medic	Jimsonweed	Radish (wild)
Broomweed	Jim Hill mustard	Ragweed
Bull thistle	(Tumble mustard)	Russian thistle
Burdock	Knotweed	Scotch thistle
Carpetweed	Lambsquarters	Shepherdspurse
Catchweed bedstraw	Lettuce (wild)	Sneezeweed
Chickweed	Mallow	Sowthistle (common)
Cinquefoil	Marestail (Horseweed)	Spanishneedles
Cockle	Marshelder	Sunflower
Cocklebur	Marijuana	Tansy mustard
Croton	Mediterranean sage	Tansy ragwort
Devilsclaw	Miners lettuce	Tumbleweed
Falseflax	Morningglory (annual)	Tumble pigweed
Fleabane (Daisy)	Musk thistle	Velvetleaf
Flixweed	Mustard	Vetch
Frenchweed	Parsnip	Wild carrot
Galinsoga	Pennycress	Wild parsnip
Goatsbeard	Pepperweed	Wild turnip
Goosefoot	Pigweed (redroot)	Witchweed
Groundsel	Plantain	Wormwood
Gumweed	Prickly lettuce	Yellow starthistle

#### ALSO CERTAIN 2,4-D SUSCEPTIBLE WOODY PLANTS SUCH AS:

Big sagebrush	Hazel	Poison oak
Buckbrush	Locust	Rabbitbrush
Cedar	Macartney rose	Sagebrush
Chamise	Manzanita	Shinnery oak
Cherokee rose	Multiflora rose	Sumac
Coastal sage	Pine	Tropical soda apple
Elderberry	Poison ivy	Willow

**Noncropland including fencerows, hedgerows, roadsides, drainage ditchbanks, firebreaks, highway rights-of-way, utility rights-of-way, airports/airfields, vacant lots and industrial sites.**

**Broadcast applications to woody plants:** Apply to trees and brush when foliage is fully expanded and plants are actively growing.

Up to 1.0 gallon of product per acre (4.0 lbs. acid equivalent per acre) may be applied in a single application.

The maximum noncropland application rate for tree, brush and woody plant control is 1.0 gallon of product per acre per application per site.

Target species	Application schedule	Maximum application rate, Gallons of product per acre	Maximum application rate, Pounds of acid equivalent per acre per application	Maximum number of applications per year	Minimum days between applications
Woody plants	Broadcast and high volume foliar	1.0 gal./A or 8 pints/A	4.0 #/A	1	NA

**High volume foliar applications (100-400 gallons per acre):**

Apply 0.25-1.0 gallon of product per acre with adequate water or apply a 0.25-1.0% vol/vol spray solution as a full cover spray with high volume equipment. Use the lower spray concentrations in the range for susceptible species and use the higher spray concentrations within the range for hard-to-control species, for mature plants during the late summer or under adverse environmental conditions (e.g. drought). The maximum seasonal application rate for trees, brush and woody plant control is 1.0 gallon of product per acre per application per site

Spray broadleaf weeds, woody plants or mixed brush uniformly and thoroughly by wetting all leaves, stems, bark and root collars. The total volume of spray solution required for adequate coverage of solid stands of mixed brush can range from 100-400 gallons of spray solution per treated acre. The spray preparation chart for applications on a spray-to-wet basis is shown below in Table 1.

**Table 1.** Instructions for preparing 100-400 gallons of spray solution at 0.25-1.0% spray concentration with water for high volume foliar applications.

Spray solution per acre, Gallons	Amount of Product Needed for Spray Concentration of:			
	0.25%	0.33%	0.5%	1.0%
100	0.25 gal.	0.33 gal.	0.5 gal.	1.0 gal.
200	0.5 gal.	0.67 gal.	1.0 gal.	—
300	0.75 gal.	1.0 gal.	—	—
400	1.0 gal.	—	—	—

Equal measures: 1 gallon = 4 quarts = 8 pints = 128 fl. oz.

**For Backpack sprayers, knapsack sprayers, and hand-pressurized pump sprayers**

**Table 2.** Instructions for preparing 1-3 gallons of spray solution at 0.25 - 1.0% spray concentration with water for high volume foliar applications.

Gallons of Water	Amount of Product Needed for Spray Concentration of:			
	0.25%	0.33%	0.5%	1.0%
1	2 teaspoons	3 teaspoons	4 teaspoons	8 teaspoons
2	4 teaspoons	2 tablespoons	3 tablespoons	6 tablespoons
3	2 tablespoons	3 tablespoons	4 tablespoons	8 tablespoons

Equal measures: 1 fl. oz. = 2 Tablespoons (Tbs.) = 6 Teaspoons (tsp.)

Dosage rate per acre depends on the density of brush and/or weeds. For small broadleaf weeds, use the lower rate. Heavy dense stands of brush require the high rate with higher water volume.

To effectively control brush, all leaves, stems and suckers should be thoroughly wetted to the ground. Apply when plants come into full leaf (spring) to the time plants begin to go dormant. Best results are obtained when brush and broadleaf weeds are young and actively growing. Do not cut brush until the herbicide has translocated throughout the plant causing root death.

**Utility and Pipeline Rights-of-Way** — Use ½ to 1 gallon per acre of Hi-Dep® in tank mix combination with other herbicides labeled for rights-of-way and apply a total spray volume of 5 to 30 gallons per acre.

**TANK MIXTURES FOR INDUSTRIAL/NONCROPLAND AREAS:**

Hi-Dep® IVM, a mixed amine salt of 2,4-D, can be applied as a tank mixture with other recommended herbicides such as Garlon®, Escort®, Tordon®, Banvel®, Vanquish®, and Accord® to broaden the spectrum of control. In order to assure maximum safety and weed control, follow all precautions and limitations on this label and the labels of products used in tank mixtures with Hi-Dep® IVM.

**Backpack** – Use 3-5% solution of Hi-Dep® IVM in tank mix combinations with other herbicides labeled for rights-of-way sites and apply in a total spray volume of 5 to 20 gallons per acre.

**TREE INJECTION:**

To control unwanted hardwood trees make injections as near the root collar as possible using one injection per inch of trunk's diameter at breast height. For resistant species such as hickory, injections should overlap. For best results injections should be made during the growing season – May 15 to October 1.

**For Concentrate Injection** – Use 1 to 2 ml. of concentrate per injection. The injector bit must penetrate the inner bark.

**LEAFY SPURGE CONTROL IN COLORADO, IDAHO, MINNESOTA, MONTANA, NEBRASKA, NORTH DAKOTA, SOUTH DAKOTA, WASHINGTON AND WYOMING:**

Hi-Dep® IVM is recommended for use in combination with Tordon® or Banvel® for the suppression and/or control of leafy spurge on industrial noncropland sites in Colorado, Idaho, Minnesota, Montana, Nebraska, North Dakota, South Dakota, Washington and Wyoming.

**HOW TO USE:**

Apply 1 to 2 quarts of Hi-Dep® IVM in combination with 1 quart of Tordon®, or 2 quarts of Hi-Dep® IVM plus 2 quarts of Banvel®, or 2 quarts of Hi-Dep® IVM plus 1 pint of Tordon® plus 1 quart of Banvel®. Rates are on a per acre basis.

Mix with water with spray volumes of 1 to 10 gallons per acre with conventional equipment. Use nozzle systems capable of delivering correct gallonage. Add a nonionic agricultural surfactant at 0.25% by vol./vol. (e.g. 1 quart of surfactant per 100 gallons of solution).

**IMPORTANT:** Before using HI-DEP® IVM, TORDON® and/or BANVEL® in these combinations, read and carefully observe the precautionary statements and all other information appearing on the product labels.

**BROADLEAF WEED CONTROL IN NONCROPLAND GRASS AREAS:**

**Airfields, Roadsides, Vacant Lots, Drainage Ditchbanks** – Use 1.0 to 3.0 quarts of product per acre. Treat when weeds are young and growing well. Usually 2 quarts of product per acre will provide adequate weed control.

**Broadcast applications to annual and perennial weeds:** Apply to emerged weeds. For best results, treat when weeds are young and actively growing.

Use 1.0-2.0 quarts of product per acre. The maximum application rate to noncropland sites is 2.0 quarts (4 pints) of product per acre per application per site.

Minimum spray volume: Use 2 or more gallons of spray solution per acre.

Number of applications: Limited to 2 applications per year.

Target species	Application schedule	Maximum application rate, Gallons of product per acre	Maximum application rate, Pounds of acid equivalent per acre per application	Maximum number of applications per year	Minimum days between applications	Minimum spray volume, gallons per acre
Annual and perennial weeds	Broadcast	2.0 quarts/A or 4 pints/A	2.0 #/A	2	30 days	2

Herbicide combinations offer advantages including improved weed control, reduced cost, and greater selectivity. Generally herbicide combinations with Hi-Dep® IVM provide an additive response, and the minimum dosage rate recommended for Hi-Dep® IVM in tank mixtures is 1.0 pint of product (0.25 pounds acid equivalent per acre).

**For Ornamental Turfgrass Established in Lawns, Golf Courses, Cemeteries, and Parks** – Use 1.0 to 2.0 quarts of product per acre. For residential and other turf sites excluding sod farms, the maximum application rate to turf is 2.0 pounds 2,4-D acid equivalent per acre per application per site. The maximum number of broadcast applications per treatment site is 2 per year.

Do not use on dichondra or other herbaceous groundcovers. Do not use on creeping grasses such as bentgrass except for spot treating nor on newly seeded turf until grass is well established. Reseeding of lawns should be delayed following treatment. With spring application, reseed in the fall; with fall application, reseed in the spring. Legumes are usually damaged or killed. Deep rooted perennial weeds such as bindweed and Canada thistle may require repeated applications.

**LIMITED WARRANTY AND DISCLAIMER**

The manufacturer warrants only that the chemical composition of this product conforms to the ingredient statement given on the label, and that the product is reasonably suited for the labeled use when applied according to the Directions for Use.

**THE MANUFACTURER NEITHER MAKES NOR INTENDS ANY OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE EXPRESSLY DISCLAIMED.**

This limited warranty does not extend to the use of the product inconsistent with label instructions, warnings or cautions, or to use of the product under abnormal conditions such as drought, excessive rainfall, tornadoes, hurricanes, etc. These factors are beyond the control of the manufacturer or the seller. Any damages arising from a breach of the manufacturer's warranty shall be limited to direct damages, and shall not include indirect or consequential damages such as loss of profits or values, except as otherwise provided by law.

The terms of this Limited Warranty and Disclaimer cannot be varied by any written or verbal statements or agreements. No employee or agent of the seller is authorized to vary or exceed the terms of this Limited Warranty and Disclaimer in any manner.

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**SPECIMEN LABEL**