

2017-5686  
2017-10-26

GROUP 4 HERBICIDE

**VMD 480 DICAMBA HERBICIDE**  
Solution

**COMMERCIAL**

**GUARANTEE:**

Dicamba, present as the dimethylamine salt..... 480 g a.e./L

REGISTRATION NUMBER 29251 PEST CONTROL PRODUCTS ACT

**READ THE LABEL AND BOOKLET BEFORE USING**

**KEEP OUT OF REACH OF CHILDREN**

**WARNING - EYE IRRITANT**



**POISON**

Net Contents: 10 Litres

Manufactured by:  
Gharda Chemicals International  
760 Newtown Yardley Rd. Suite 110  
Newtown, PA  
18940 U.S.A.

Distributed in Canada by:  
Gharda Chemicals International  
789 Donnybrook Dr.  
Dorchester ON  
NOL1G5 CA

215-968-9474

1-800-265-4624

VMD 480 Dicamba Herbicide controls broadleaf weeds in pastures and rangeland grasses. Also for control of deciduous and coniferous brush species and broadleaf weeds in non-cropland areas such as roadsides, hydro, pipeline and railway rights-of-way, airports, military bases, turf, wasteland and similar non crop land areas.

**ENVIRONMENTAL HAZARDS:**

TOXIC to aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under **DIRECTIONS FOR USE**

**RESISTANCE-MANAGEMENT RECOMMENDATIONS**

For resistance management, VMD 480 Dicamba Herbicide is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to VMD 480 Dicamba Herbicide and other Group 4 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Other resistance mechanisms that are not linked to the site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance management strategies should be followed. To delay herbicide resistance:

- Where possible, rotate the use of VMD 480 Dicamba Herbicide or other Group 4 herbicides 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.
- Herbicide use should be based on an IPM program that includes scouting. Historical information related to herbicide use and considers tillage ( or other mechanical) , cultural, biological and other chemical control practices.
- Monitor treated weed populations for resistance development.
- Prevent movement of resistant weed seeds to other fields by cleaning tillage equipment and planting clean seed.
- Contact your local extension specialist for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific weed biotypes.
- For further information or to report suspected resistance, contact Gharda Genetics Corporation at 215-497-9501.

**GENERAL PRECAUTIONS:**

1. VMD 480 Dicamba Herbicide should not be applied on or near desirable trees or plants.
2. Apply VMD 480 Dicamba Herbicide when air temperature is between 10 - 25°C. Do not apply when there is a risk of severe fall in night temperature after use.
3. Do not contaminate domestic or irrigation water. Thoroughly clean application equipment.
4. Do not treat areas where movement of the chemical into the soil or surface washing may bring VMD 480 Dicamba Herbicide into contact with roots of desirable plants.
5. For information on feeding and grazing of beef and dairy cattle on treated vegetation and for recommendations on treatment/harvest intervals, refer to the table on Grazing Restrictions.
6. If VMD 480 D Dicamba Herbicide is tank mixed with another product, such as 2,4-D, consult that product's label for additional safety precautions, restrictions, application rates, timings and additional weeds controlled.

7. Ensure that spray equipment used to apply VMD 480 Dicamba Herbicide is properly cleaned before reusing to apply any other chemicals. See section on suggested procedure for cleaning spray equipment.

**SPRAY DRIFT PRECAUTIONS:**

VMD 480 Dicamba Herbicide may cause injury to desirable trees and plants, particularly soybeans, flowers, fruit trees, grapes, ornamentals, peas, potatoes, tomatoes, tobacco and other broadleaf plants especially in their developmental and growing stage.

Follow these precautions when spraying in the vicinity of sensitive crops:

1. Avoid spraying when winds are gusty or in excess of 8 km/h and moving towards sensitive crops. Leave an adequate buffer zone between areas to be treated and sensitive plants.
2. Use coarse sprays since they are less likely to drift than fine sprays. Select nozzles which minimize amounts of the fine spray particles. Keep the spray pressure below 150 kPa and the spray volume above 220 L/ha unless otherwise required by the nozzle manufacturer.
3. Do not spray when the temperature is expected to exceed 30°C.
4. Avoid spraying under conditions of high humidity or fog.

## **PRECAUTIONS**

**KEEP OUT OF REACH OF CHILDREN.** Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes and clothing. Applicators must wear coveralls over long pants, a long-sleeved shirt and chemical-resistant gloves. **DO NOT** enter fields until 12 hours after application.

For non-crop areas (roadsides, hydro, pipeline and railway rights-of-way, airports, military bases, turf, wasteland), applicators must wear coveralls over long pants, a long-sleeved shirt and chemical-resistant gloves.

**DO NOT** use in residential areas, which are defined as sites where bystanders may be present during or after spraying, including homes, schools, parks, playgrounds, playing fields and public buildings."

Thaw if frozen. Shake before use.

**DO NOT** apply by air.

## **FIRST AID**

**If Inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

**If on Skin or Clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

**If in Eyes:** 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. Call a poison control centre or doctor for further treatment advice.

**If Swallowed:** Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by poison control centre or doctor. Do not give anything by mouth to an unconscious person.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention

## **HOT LINE NUMBER**

For emergency medical treatment information call: 1-866-359-5660

## **NOTE TO PHYSICIAN**

Probable mucosal damage may contraindicate the use of gastric lavage.

## **TOXICOLOGICAL INFORMATION**

Dicamba may cause severe irritation to the eyes, and irritation to the skin and mucous membranes. Symptoms of overexposure to dicamba may include dizziness, muscle weakness, loss of appetite, weight loss, vomiting, decreased heart rate, shortness of

breath, excitement, tenseness, depression, incontinence, cyanosis, muscle spasms, exhaustion and loss of voice. Treat symptomatically.

**CONTAINER CLEANING AND DISPOSAL:**

1. Triple-or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
3. Make the empty container unsuitable for further use.
4. Dispose of the container in accordance with provincial requirements.
5. For information on the disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

**VMD 480 Dicamba Herbicide alone or with 2,4-D or MCPA**

If you have used VMD 480 Dicamba Herbicide alone or VMD 480 Dicamba Herbicide in a tank mix with 2,4-D or MCPA, to clean the spray equipment follow these steps:

1. Thoroughly hose down the inside and outside of equipment surfaces while filling the spray tank half-full with water. Flush by operating the sprayer until the system is purged of the rinse water.
2. Fill the tank with water, adding 1 L of household ammonia for every 100 L of water. Operate the spray pump to circulate the ammonia solution through the sprayer solution for 15-20 minutes and discharge a small amount of the ammonia solution through the spray boom and nozzles.
3. Flush the solution out of the spray tank through the boom.
4. Remove the nozzles and screens and flush the system with two tanks full of water.

**VMD 480 Dicamba Herbicide with other herbicides**

To clean spray equipment used to apply VMD 480 Dicamba Herbicide as a tank mix with wettable powders (WP), emulsifiable concentrates (EC) or other types of water-dispersible formulations, follow these steps: (Note that if you use VMD 480 Dicamba Herbicide tank mixes with waterdispersible formulation, you must add detergent to the rinse water.)

1. Thoroughly hose down the inside and outside of equipment surfaces while filling the spray tank half-full with water. Flush by operating the sprayer until the system is purged of the rinse water.
2. Fill tank with water while adding 1 kg of detergent for every 150 litres of water. Operate the pump to circulate the detergent solution through the sprayer system for 5-10 minutes and discharge a small amount of the solution through the boom and nozzles. Let the solution stand for several hours, preferably overnight.
3. Flush the detergent solution out of the spray tank through the boom.
4. Repeat step 1 and follow steps 2 and 3.

**Bulk container refilling:**

1. The container is to be refilled by the distributor/dealer only with VMD 480 Dicamba Herbicide . Do not reuse this container for any other purpose.

2. Reseal and return to an authorized Bulk Site.
3. Prior to refilling, inspect thoroughly for damage such as cracks, punctures, bulges, dents, abrasions and damaged or worn threads on closure devices.
4. Check for leaks after refilling and before transportation.
5. Do not refill or transport damaged or leaking containers.
6. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.
7. If the container is not being refilled, return to the point of purchase (distributor/dealer) for disposal.

**STORAGE:**

Store VMD 480 Dicamba Herbicide in its original container only, away from other pesticides, fertilizer, food, or feed. Keep the container closed to prevent spills and contamination. Keep packages dry at all times.

**NOTICE TO USER:**

This control product is to be used only in accordance with the directions on this label. It is an offence under the *PEST CONTROL PRODUCTS ACT* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

VMD 480 is a trademark of Adjuvants Plus Incorporate

® All other herbicides listed are registered trademarks of their respective companies.

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NOL1G5 CA  
1-800-265-4624

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6. If VMD 480 Dicamba Herbicide is tank mixed with another product, such as 2,4-D, consult that product's label for additional safety precautions, restrictions, application rates, timings and additional weeds controlled.
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- Where possible, rotate the use of VMD 480 Dicamba Herbicide or other Group 4 herbicides 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.
- Herbicide use should be based on an IPM program that includes scouting. Historical information related to herbicide use and considers tillage ( or other mechanical) , cultural, biological and other chemical control practices.
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- For further information or to report suspected resistance, contact Gharda Genetics Corporation at 215-497-9501.

## **DIRECTIONS FOR USE:**

**DO NOT** graze cattle on treated crop, or harvest for silage until 7 days following the application of VMD 480 Dicamba Herbicide alone and at least 12 weeks following treatment with VMD 480 Dicamba Herbicide tank mixes.

**DO NOT** harvest forage or cut hay within 30 days after application. Withdraw meat animals from treated fields at least 3 days before slaughter.

**DO NOT** apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands), estuarine or marine habitats.

**DO NOT** contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

### **Surface Runoff**

To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include but are not limited to heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g. soils that are compacted, fine textured, or low in organic matter such as clay). Potential for contamination of aquatic areas as a result of runoff may be reduced by including an untreated vegetative strip between the treated area and the edge of the water body. Avoid applying this product when heavy rain is forecast.

### **Leaching**

The use of this chemical may result in contamination of groundwater, particularly in areas where soils are permeable (e.g. sand, loamy sand and sandy loam soils) and/or the depth to the water table is shallow.

Field sprayer application: DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) coarse classification. Boom height must be 60 cm or less above the crop or ground.

Aerial application: DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply when wind speed is greater than 16 km/h at flying height at the site of application. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) coarse classification. To reduce drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length MUST NOT exceed 65% of the wing- or rotorspan.

**Buffer zones:**

Use of the following spray methods or equipment DOES NOT require a buffer zone: hand-held or backpack sprayer, spot treatment, inter-row hooded sprayer, soil drench and soil incorporation.

For application to rights-of-way, buffer zones for protection of sensitive terrestrial habitats are not required; however, the best available application strategies to minimize off-site drift, including meteorological conditions (e.g. wind direction, low wind speed) and spray equipment (e.g. coarse droplet sizes, minimizing height above canopy), should be used. Applicators must, however, observe the specified buffer zones for protection of sensitive aquatic habitats.

The buffer zones specified in the tables below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

When a tank mixture is used, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture.

**Table 1 Buffer Zones for Uses in Agriculture and Industrial Sites using ASAE Coarse Applications**

Method of application	Crop	Buffer zones (metres) Required for the Protection of:					
		Freshwater habitat of depths:		Estuarine/marine habitats of depth		Terrestrial habitat	
		Less than 1m	Greater than 1m	Less than 1m	Greater than 1m		
Field Sprayer*	Pasture and rangeland, non-cropland (including rights-of-way** and brush control) (2.2 kg a.i./ha)	1	1	0	0	10	
	non-cropland (including rights-of-way** and brush control) (4.4 kg a.i./ha)	1	1	1	0	20	
Aerial	non-cropland (including rights-of-way** and wastelands)	Fixed Wing	45	30	0	0	800
		Rotary Wing	30	20	0	0	525

\*For field sprayer application, buffer zones can be reduced with the use of drift-reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy, the labelled buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with cone-shaped shields that are no more than 30 cm above the crop canopy, the labelled buffer zone can be reduced by 30%.

\*\*Buffer zones for the protection of terrestrial habitats are not required for use on rights-of-way, including railroad ballast, rail and hydro rightsof- way, utility easements, roads, and training grounds and firing ranges on military bases.

**PASTURES, RANGELAND, AND NON-CROP AREAS**

Treatment notes:

For broadleaf weed control:

1. Apply VMD 480 Dicamba Herbicide or VMD 480 Dicamba Herbicide tank mixes in 110-220 L of water/ha when weeds are actively growing. Thorough coverage of foliage is necessary to control weeds.
2. Do not apply VMD 480 Dicamba Herbicide or VMD 480 Dicamba Herbicide tank mixes pasture is underseeded to legumes.

Applicators must wear a long-sleeved shirt, long pants, and chemical-resistant gloves.

RE-ENTRY INTERVAL:

DO NOT enter treated field until 12 hours after application.

DO NOT APPLY BY AIR

<b>Weeds Controlled (in alphabetical order)</b>	<b>VMD 480 Dicamba Herbicide Rate</b>	<b>Tank Mix</b>
bindweed, field daisy, English dock, curled (top growth) goldenrod ragwort, tansy sow-thistle, perennial thistle,	VMD 480 Dicamba Herbicide alone at 2.1 L/ha	None
Canada beard, goat's cherry, ground knapweed, diffuse sage, pasture sorrel, sheep spurge, thyme-leafed weed,	VMD 480 Dicamba Herbicide alone at 4.6 L/ha	None
Poison Ivy	VMD 480 Dicamba Herbicide at 1.65 L/ha +	2.2 L/ha of 2,4-D amine(500 g/L formulation) in 560 L of water/ha
wild carrot plus additional weeds found on the 2,4-D amine label	VMD 480 Dicamba Herbicide at 2.1 L/ha +	2.2 L/ha of 2,4-D amine 500 g/L formulation)
All of the above plus:	VMD 480 Dicamba	1.83 L/ha of 2,4-D L.V.

additional weeds found on the 2,4-D amine label	Herbicide at 2.1 L/ha +	ester (600 g/L formulation)
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For brush weed control:

1. VMD 480 Dicamba Herbicide is effective in controlling many deciduous brush species that are found growing along fence rows and in other areas around the farm where they may be undesirable.
2. Apply VMD 480 Dicamba Herbicide tank mixes in spring or early summer to deciduous species (leaves should be fully expanded) either as a leaf stem treatment or as a broadcast ground application.
3. Brush and trees over 2 meters tall should be cut and re-growth treated when it develops.
4. Do not apply VMD 480 Dicamba Herbicide tank mixes if pasture or rangeland is underseeded to legumes.
5. For Stem Foliage Treatment, apply to all foliage and stems to the point of runoff. The volume of spray mix applied per hectare will vary according to the height and density of the woody species present.
6. For Broadcast Ground Treatment, apply VMD 480 Dicamba Herbicide tank mixes in sufficient dilution to wet all foliage. Normally, 220-230 litres of water/ha is recommended for brush stands.

**DO NOT APPLY BY AIR**

Weeds Controlled (in alphabetical order )	VMD 480 Dicamba Herbicide Rate	Tank Mix
Alder, aspen poplar Cherry, western Snowberry (buckbrush) wolf willow (silverwillow) wild rose	VMD 480 Dicamba Herbicide at 2.1 L/ha/1000 L of water +	4.0 L/ha of 2,4-D amine (500 g/L formulation) OR 3.3 L/ha of 2,4-D L.V. (600 g/L formulation)
Aspen poplar	VMD 480 Dicamba Herbicide at 3.25 L/ha +	4.4 L/ha of 2,4-D amine (500 g/L formulation) OR 3.75 L/ha of 2,4-D L.V. ester (600 g/L formulation)
prickly rose	VMD 480 Dicamba Herbicide at 3.65 L/ha +	4.4 L/ha of 2,4-D amine (500 g/L formulation) OR 3.75 L/ha of 2,4-D L.V. ester (600 g/L formulation)
western snowberry	VMD 480 Dicamba Herbicide at 3.65	3.75 L/ha of 2,4-D L.V. ester

	L/ha +	(600 g/L formulation)
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**Grazing restrictions:**

DO NOT graze cattle on treated crop, or harvest for silage until 7 days following the application of VMD 480 Dicamba Herbicide alone and at least 12 weeks following treatment with VMD 480 Dicamba Herbicide tank mixes

DO NOT harvest forage or cut hay within 30 days after application.

Withdraw meat animals from treated field at least 3 days before slaughter.

**NON CROP AREAS SUCH AS RIGHTS-OF-WAY, UTILITY, ROADSIDES, HYDRO, PIPELINE AND RAILWAY RIGHTS-OF-WAY, AIRPORTS, MILITARY BASES, TURF, WASTELAND AND SIMILAR NON CROP AREAS.**

Applicators must wear coveralls over long pants, a long-sleeved shirt and chemical-resistant gloves.

For high volume handwand applications, applicators must limit volume of solution used per day to 400 L (broadleaf control spot treatment only).

**RE-ENTRY INTERVAL:**

DO NOT enter treated field until 12 hours after application.

**Method:**

Ground or Aerial application (stubble land and uncropped land).

Ground application (turf, roadsides, airports and industrial parks).

**GRAZING and HARVESTING RESTRICTIONS for ROADSIDE, WASTELAND AND SIMILAR NON CROP AREAS:**

DO NOT graze cattle on treated crop, or harvest for silage until 7 days after application of VMD 480 Dicamba Herbicide alone and at least 12 weeks following treatment with VMD 480 Dicamba Herbicide tank mixes.

DO NOT harvest forage or cut hay within 30 days after application.

Withdraw meat animals from treated fields at least 3 days before slaughter

**BRUSH CONTROL:**

VMD 480 Dicamba Herbicide tank-mixtures are effective in controlling many coniferous and deciduous brush species found in areas where they may be undesirable.

1. Prepare a tank-mix consisting of VMD 480 Dicamba Herbicide plus 2,4-D amine, 2,4 D L.V. ester or 2,4 D/2,4 DP herbicide.

2. Apply VMD 480 Dicamba Herbicide tank-mixes in spring or early summer to coniferous and deciduous brush species (after the leaves have fully expanded). Stop applications at least 3 weeks prior to change of leaf colour in the fall.
3. For best results and ease of application, cut brush or trees over 2M in height and treat re-growth when it develops.
4. Do not mix VMD 480 Dicamba Herbicide with any oils.

**FOLIAGE AND STEM TREATMENT:**

Ground Application Directions

1. Apply to foliage and to stems to the point of run-off. Complete coverage is essential for effective control.
2. The volume of spray required per hectare will vary according to the height and density of the woody species present.
3. Use of a tank-mix with 2,4 D L.V. ester herbicide with the water conditioner Adjust may improve the control of balsam poplar as well as other species when they are under drought stress, especially under periods of hot, dry weather.

SPECIES CONTROLLED	RATE PER 1000L OF SPRAY WATER
Western snowberry (Buckbush) Wolf willow (silver willow) Aspen poplar, Wild rose Alder, Cherry	2.1 L of VMD 480 Dicamba Herbicide + 4L of 2,4-D amine(500g/L formulation) herbicide or 3.3 L of 2,4-D L.V. ester (600g/L formulation) herbicide
Balsam poplar, Basswood, Birch Elm, Hickory, Vine maple, Black cottonwood, Bur Oak, Red Oak Tamarack, Pine, White Cedar, Spruce Balsam fir	4 L of VMD 480 Dicamba Herbicide + 8 L 2,4-D amine (500 g/L formulation) herbicide or 6.6 L of 2,4-D L.V. ester 600g/L formulation) herbicide
Sugar maple White ash	5.2 L VMD 480 Dicamba Herbicide plus 7.1 L of 2,4-D/2,4- DP L.V. ester (350 g/L 2,4-D; 350 g/L 2,4-DP formulation)

**BROADCAST GROUND TREATMENT:**

Application Directions:

1. Apply in sufficient water to wet all foliage
2. A water volume of 220-330 Litres per hectare is recommended for bush stands.

SPECIES CONTROLLED	RATE PER HECTARE
White (paper) birch Willow	4.2 L of VMD 480 Dicamba Herbicide plus 8 L of 2,4-D amine (500g/L formulation)

Aspen poplar	herbicide OR 6.6 L 2,4-D L.V.ester (600g/L formulation) herbicide OR 5.2 L of VMD 480 Dicamba Herbicide + 7.2 L of 2,4-D/2,4-DP L.V. ester (350g/L 2,4-D; 350 g/L 2,4-DP formulation) herbicide
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**AERIAL APPLICATIONS:**

Aerial applicators must wear long pants and a long-sleeved shirt.

Aerial mixers/loaders must wear long pants and a long-sleeved shirt and chemical-resistant gloves.

Must use closed cab aircraft.

Mixer/loader and applicator must be different individuals.

No human flaggers are permitted.

Label rates, conditions and precautions are product specific. Read and understand the entire label before opening and using this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for a specific use, this product cannot be applied by any type of aerial equipment. Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

**Application Directions:**

1. VMD 480 Dicamba Herbicide tank-mixes may be applied aerially in not less than 85 litres of water per hectare
2. Do not spray when wind velocities are greater than 15 km/hour
3. Do not use nozzle pressure above 300 kPa.
4. Do not spray when wind is blowing towards nearby desirable trees or plants.

SPECIES CONTROLLED	RATE PER HECTARE
Aspen poplar White (paper) birch	4.2 L VMD 480 Dicamba Herbicide + 8 L of 2,4-D amine (500g/L formulation) or 6.6 L of 2,4-D L.V. ester (600g/L formulation) herbicide.

**Use Precautions**

Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application as outlined in the National Aerial Pesticide Application Manual, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides. Do not apply to any body of water. Avoid drifting of spray onto any body of water or other non-target areas. Specified buffer zones should be observed.

Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that will result in fine particles (mist). Do not apply during periods of dead calm or when wind velocity and direction pose a risk of spray drift. Do not spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt) or aquatic habitat.

### **Operator Precautions**

Do not allow the pilot to mix chemicals to be loaded onto aircraft. Loading of premixed chemicals with a closed system is permitted.

It is desirable that the pilot have communication capabilities at each treatment site at the time of application.

The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls and goggles or face shield during mixing/loading, cleanup and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

### **BROADLEAF WEED CONTROL**

VMD 480 Dicamba Herbicide can be used alone or in tank-mixes with 2,4-D amine or 2,4-D L.V. ester herbicide. VMD 480 Dicamba Herbicide tank-mixes offer additional broadleaf weed control.

### **IMPORTANT (Ground Application Directions)**

Apply VMD 480 Dicamba Herbicide or VMD 480 Dicamba Herbicide tank-mixes in 110 to 220 water per hectare when weeds are actively growing. For poison ivy control use 560 litres of water per hectare. Thorough coverage of foliage is necessary to control weeds. For control of a broader range of weeds, the recommended rate of VMD 480 Dicamba Herbicide may be tank mixed with 2,4-D amine (500g/L) or 2,4-D ester (600 g/L) herbicide. Consult 2,4-D herbicide label regarding rates of application and weed species controlled.

<b>SPECIES CONTROLLED</b>	<b>RATE PER HECTARE</b>
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alphabetical order)	
Poison Ivy	1.7 L VMD 480 Dicamba Herbicide + 2.2 L of 2,4-D Amine (500g/L) herbicide
Wild Carrot	2.1 L VMD 480 Dicamba Herbicide + 4.4 L of 2,4-D Amine (500g/L) herbicide
VMD 480 Herbicide alone for top growth control of: Absinthe Canada thistle Perennial Sow Thistle Leafy Spurge Poverty Weed Scentless mayweed	1.25L VMD 480 Dicamba Herbicide
VMD 480 Dicamba Herbicide alone controls: Perennial sow thistle Common ragweed English daisy Goldenrod Tansy ragwort Canada thistle Field bindweed Top growth of curled dock False ragweed Giant ragweed	2.3 L VMD 480 Dicamba Herbicide
Diffuse knapweed Goat's beard Ground cherry Pasture sage Poverty weed Sheep sorrel Thyme-leafed spurge	4.6 L VMD 480 Dicamba Herbicide
Baby's breath Fringed sage brush Lambkill Velvet grass And top growth control of: Bracken fern Perennial cinquefoil Russian knapweed	9.2 L VMD 480 Dicamba Herbicide

**ROADSIDE VEGETATION CONTROL:**

VMD 480 Dicamba Herbicide can be used in tank-mix with Roundup® for annual vegetation control on 1-2 meter wide roadside shoulders. VMD 480 Dicamba Herbicide tank- mixtures with Roundup® and 2,4 D amine offer a broader spectrum of total control of roadside vegetation. Ground application only.

**IMPORTANT (Application Directions)**

1. Apply 1.25 -2.5 L/ha of VMD 480 Dicamba Herbicide in tank-mix with 0.75-1 L/ha Roundup®.
2. Apply 0.3 L/ha of VMD 480 Dicamba Herbicide in tank-mix with 1.2 L/ha of 2,4-D amine (500g/L formulation) and 0.75 to 1 L/ha of Roundup®.

\*Refer to Roundup® label for the appropriate rate of Roundup® for specific weed control and for additional precautions and application instructions.

**ESTABLISHED TURF:**

VMD 480 Dicamba Herbicide can be used alone or in a tank-mix with 2,4 D amine or 2,4 D L.V. ester herbicide. VMD 480 Dicamba Herbicide tank-mixtures offer additional broadleaf weed control and are particularly effective against dandelion and plantain.

**IMPORTANT (Application Directions)**

Apply VMD 480 Dicamba Herbicide or VMD 480 Dicamba Herbicide tank-mixtures in at least 110 Litres of water per hectare as a foliar spray to actively growing weeds. Best results will be obtained if application is made in early spring or fall, 2 weeks prior to frost. Apply with caution near trees or shrubs. Do not apply closer than the drip line of trees or shrubs. Do not apply to Bent Grass lawns. Do not rake, mow or water lawn within 24 hours after application. For control of a broader range of weeds, the recommended rate of VMD 480 Dicamba Herbicide may be tank mixed with 2.2 Litres of 2,4 D amine (500g/L) or 2 Litres of 2,4 D ester ( 600g/L) herbicide.

Applicators must wear coveralls over long pants, a long-sleeved shirt and chemical-resistant gloves.

For high volume handwand applications, applicators must limit volume of solution used per day to 400 L (broadleaf control spot treatment only).

SPECIES CONTROLLED	RATE PER HECTARE
Clover Sheep Sorrel Mouse-eared chickweed Erect Knotweed	1.25 L VMD 480 Dicamba Herbicide

DO NOT apply by air.

This product does not prevent weeds. Apply only when weeds are present. This product works best when applied to the leaves of actively growing weeds.

**DO NOT** apply more than two broadcast applications per season. This does not include spot treatments. If weed populations do not warrant a broadcast application (e.g. entire lawn), consider spot treatments that target only weedy areas.

Avoid application of this product when winds are gusty.

TOXIC to broadleaf terrestrial plants. This product may harm other broadleaf plants in the vicinity of the treatment area. If applying this product using a handheld sprayer, **DO NOT** directly spray or allow the spray to drift onto ornamentals or gardens. **DO NOT** apply to the exposed roots of trees and ornamentals.

To prevent runoff, **DO NOT** apply to driveways, sidewalks or any other hard surface.

**DO NOT** irrigate within 24 hours after application

**RE-ENTRY INTERVAL:**

Do not allow people (other than applicator) or pets on treatment area during application. Do not enter treated areas until spray has thoroughly dried.

Field sprayer application: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) **MEDIUM** classification. Boom height must be 60 cm or less above the crop or ground.

**Buffer zones:**

Use of the following spray methods or equipment **DOES NOT** require a buffer zone: hand-held or backpack sprayer and spot treatment. The buffer zones specified in the tables below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

When a tank mixture is used, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture.

**Table 2 Buffer Zones for Uses in Turf (for liquid commercial class products that may be applied by tractor-pulled field sprayers, e.g. to golf courses or sod farms)**

Method of application	Crop	Buffer zones (metres) Required for the Protection of:		
		Aquatic Habitat of Depths		Terrestrial habitat
		Less than 1m	Greater than 1m	
Field Sprayer*	Turf ( up to 135 g a.i./ha)	0	0	3

	Turf (550-600 g a.i./ha)	1	1	10
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\*For field sprayer application, buffer zones can be reduced with the use of drift-reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy, the labeled buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with cone-shaped shields that are no more than 30 cm above the crop canopy, the labeled buffer zone can be reduced by 30%.

## **PRECAUTIONS**

**KEEP OUT OF REACH OF CHILDREN.** Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes and clothing. Applicators must wear a long-sleeved shirt, long pants and chemical-resistant gloves. For non-crop areas (roadsides, hydro, pipeline and railway rights-of-way, airports, military bases, turf, wasteland), applicators must wear coveralls over long pants, a long-sleeved shirt and chemical-resistant gloves.

**DO NOT** enter treated fields until 12 hours after application.

**DO NOT** use in residential areas, which are defined as sites where bystanders may be present during or after spraying, including homes, schools, parks, playgrounds, playing fields and public buildings. Thaw if frozen. Shake before use.

**DO NOT** apply by air.

This product does not prevent weeds. Apply only when weeds are present. This product works best when applied to the leaves of actively growing weeds.

## **FIRST AID**

**If Inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

**If on Skin or Clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

**If in Eyes:** 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. Call a poison control centre or doctor for further treatment advice.

**If Swallowed:** Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by poison control centre or doctor. Do not give anything by mouth to an unconscious person.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention

## **HOT LINE NUMBER**

For emergency medical treatment information call: 1-866-359-5660

## **NOTE TO PHYSICIAN**

Probable mucosal damage may contraindicate the use of gastric lavage.

## **TOXICOLOGICAL INFORMATION**

Dicamba may cause severe irritation to the eyes,\* and irritation to the skin and mucous membranes. Symptoms of overexposure to dicamba may include dizziness, muscle weakness, loss of appetite, weight loss, vomiting, decreased heart rate, shortness of breath, excitement, tenseness, depression, incontinence, cyanosis, muscle spasms, exhaustion and loss of voice. Treat symptomatically.

## **CONTAINER CLEANING AND DISPOSAL:**

1. Triple-or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
3. Make the empty container unsuitable for further use.
4. Dispose of the container in accordance with provincial requirements.
5. For information on the disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

## **VMD 480 Dicamba Herbicide alone or with 2,4-D or MCPA**

If you have used VMD 480 alone or VMD 480 in a tank mix with 2,4-D or MCPA, to clean the spray equipment follow these steps:

1. Thoroughly hose down the inside and outside of equipment surfaces while filling the spray tank half-full with water. Flush by operating the sprayer until the system is purged of the rinse water.
2. Fill the tank with water, adding 1 L of household ammonia for every 100 L of water. Operate the spray pump to circulate the ammonia solution through the sprayer solution for 15-20 minutes and discharge a small amount of the ammonia solution through the spray boom and nozzles.
3. Flush the solution out of the spray tank through the boom.
4. Remove the nozzles and screens and flush the system with two tanks full of water.

## **VMD 480 Dicamba Herbicide with other herbicides**

To clean spray equipment used to apply VMD 480 as a tank mix with wettable powders (WP), emulsifiable concentrates (EC) or other types of water-dispersible formulations, follow these steps: (Note that if you use VMD 480 tank mixes with waterdispersible formulation, you must add detergent to the rinse water.)

1. Thoroughly hose down the inside and outside of equipment surfaces while filling the spray tank half-full with water. Flush by operating the sprayer until the system is purged of the rinse water.
2. Fill tank with water while adding 1 kg of detergent for every 150 litres of water. Operate the pump to circulate the detergent solution through the sprayer system for 5-10 minutes and discharge a small amount of the solution through the boom and nozzles. Let the solution stand for several hours, preferably overnight.
3. Flush the detergent solution out of the spray tank through the boom.
4. Repeat step 1 and follow steps 2 and 3.

**Bulk container refilling:**

1. The container is to be refilled by the distributor/dealer only with VMD 480. Do not reuse this container for any other purpose.
2. Reseal and return to an authorized Bulk Site.
3. Prior to refilling, inspect thoroughly for damage such as cracks, punctures, bulges, dents, abrasions and damaged or worn threads on closure devices.
4. Check for leaks after refilling and before transportation.
5. Do not refill or transport damaged or leaking containers.
6. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.
7. If the container is not being refilled, return to the point of purchase (distributor/dealer) for disposal.

**STORAGE:**

Store VMD 480 in its original container only, away from other pesticides, fertilizer, food, or feed. Keep the container closed to prevent spills and contamination. Keep packages dry at all times.

**NOTICE TO USER:**

This control product is to be used only in accordance with the directions on this label. It is an offence under the *PEST CONTROL PRODUCTS ACT* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

VMD 480 is a trademark of Adjuvants Plus Incorporate

® All other herbicides listed are registered trademarks of their respective companies.