GROUP 5 HERBICIDE

Front

SIMAZINE 480 HERBICIDE SOLUTION COMMERCIAL



CAUTION POISON

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING KEEP OUT OF REACH OF CHILDREN

GUARANTEE: Simazine and Related triazines 480g/L Contains 1, 2-benzisothiazolin-3-one at 0.010% as a preservative.

REGISTRATION NO. 23181 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 9.46 L

LOVELAND PRODUCTS CANADA INC. 789 Donnybrook Drive Dorchester, Ontario NOL 1G5 1-800-328-4678

12/2010

GENERAL PRECAUTIONS KEEP OUT OF REACH OF CHILDREN.

Harmful if swallowed. Avoid contact with eyes or prolonged contact with skin. Wear coveralls over a long-sleeved shirt and long pants, and chemical-resistant gloves during mixing/loading. Wear a long sleeved shirt and long pants during application, cleanup and repair. In addition, wear chemical-resistant gloves and a NIOSH-approved respirator with a dust/mist filter during application using handheld equipment. Avoid inhalation of vapours or spray mist and prevent contamination of food and feed. Do not apply, or allow drift to desirable vegetation. Do not contaminate domestic or irrigation water supplies, lakes, streams and ponds. Do not allow material to freeze.

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 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 a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

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 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.

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

TOXICOLOGICAL INFORMATION

If SIMAZINE is ingested accidentally, there is no specific antidote. Induce emesis, lavage stomach. Treat symptomatically.

ENVIRONMENTAL HAZARDS

TOXIC to birds and small wild mammals.

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

DO NOT apply to any body of water.

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

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

To reduce runoff from treated areas into aquatic habitats, avoid application to areas with a moderate to steep slope, compacted soil, or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

Product must not be mixed or loaded, or used within 15 metres of all wells, including abandoned wells, drainage wells and sink holes.

Product must not be mixed or loaded within 15 metres of intermittent streams and rivers, natural or impounded lakes and reservoirs.

One of the following restrictions must be used in applying simazine to fields containing tile drainage systems:

- Do not apply within 20 m of standpipes.
- Apply this product to the entire field and immediately incorporate it to a depth of 5 to 8 cm.
- Apply this product to the entire field under a no-till practice only when a high crop residue management practice is used. High crop residue management is described as a crop management practice where little or no crop residue is removed from the field during and after crop harvest.

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 the clean-up of spills.

NOTICE TO USER: This pest 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.

Datapak

SIMAZINE 480 HERBICIDE SOLUTION COMMERCIAL



CAUTION POISON

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING
KEEP OUT OF REACH OF CHILDREN

GUARANTEE: Simazine and Related triazines 480g/L Contains 1,2-benzisothiazolin-3-one at 0.010% as a preservative.

REGISTRATION NO. 23181 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 9.46 L

LOVELAND PRODUCTS CANADA INC. 789 Donnybrook Drive Dorchester, Ontario NOL 1G5 1-800-328-4678 12/2010

GENERAL PRECAUTIONS KEEP OUT OF REACH OF CHILDREN.

Harmful if swallowed. Avoid contact with eyes or prolonged contact with skin. Wear coveralls over a long-sleeved shirt and long pants, and chemical-resistant gloves during mixing/loading. Wear a long sleeved shirt and long pants during application, cleanup and repair. In addition, wear chemical-resistant gloves and a NIOSH-approved respirator with a dust/mist filter during application using handheld equipment. Avoid inhalation of vapours or spray mist and prevent contamination of food and feed. Do not apply, or allow drift to desirable vegetation. Do not contaminate domestic or irrigation water supplies, lakes, streams and ponds. Do not allow material to freeze.

RESISTANCE MANAGEMENT RECOMMENDATIONS:

For resistance management, SIMAZINE 480 Herbicide is a Group 5 herbicide. Any weed population may contain or develop plants naturally resistant to SIMAZINE 480 Herbicide and other Group 5 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 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 SIMAZINE 480 Herbicide or other Group 5 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 crop rotation, and considers tillage, 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 harvesting and tillage equipment and planting clean seed.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Technical Service at 1-800-328-4678 or at www.uap.ca.

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 SWALLOWED: Call a poison control centre or doctor immediately for treatment advice. Here person sin a glass of water if able to swallow. Do not induce veryiting

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

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 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.

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

TOXICOLOGICAL INFORMATION

If SIMAZINE is ingested accidentally, there is no specific antidote. Induce emesis, lavage stomach. Treat symptomatically.

ENVIRONMENTAL HAZARDS

TOXIC to birds and small wild mammals.

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

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

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

To reduce runoff from treated areas into aquatic habitats, avoid application to areas with a moderate to steep slope, compacted soil, or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

Product must not be mixed or loaded, or used within 15 metres of all wells, including abandoned wells, drainage wells and sink holes.

Product must not be mixed or loaded within 15 metres of intermittent streams and rivers, natural or impounded lakes and reservoirs.

One of the following restrictions must be used in applying simazine to fields containing tile drainage systems:

- Do not apply within 20 m of standpipes.
- Apply this product to the entire field and immediately incorporate it to a depth of 5 to 8 cm.
- Apply this product to the entire field under a no-till practice only when a high crop residue management practice is used. High crop residue management is described as a crop management practice where little or no crop residue is removed from the field during and after crop harvest.

DIRECTIONS FOR USE

For weed control in certain fruit crops, Asparagus, Ornamentals, Shelter belts and corn.

DO NOT enter or allow worker entry into treated areas for 12 hours following application.

<u>For fruit and nut crop:</u> Apply the spray to the orchard or vineyard floor, avoiding contact with fruit, foliage or stems.

<u>Field sprayer application:</u> **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 medium classification. Boom height must be 60 cm or less above the crop or ground.

DO NOT apply by air.

Buffer zones:

Use of the following spray methods or equipment **DO NOT** require a buffer zone: handheld or backpack sprayer and spot treatment.

The buffer zones specified in the table 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.

Method of Application	Crop	Buffer Zones (metres) Required for the Protection of: Aquatic Habitat of Depths: Habitat Less than Greater		
				Habitat
		1 m	than 1 m	
Field	Fruits trees <1 year-old (apple,	1	1	5
sprayer*	pear), Corn (sweet)			
	Corn (field), Nursery stock, Woody ornamentals Raspberry, Conifers	1	1	10
	for Outdoor Field Production			
	Asparagus, Grape, Loganberry,	2	1	15
	Apple tree >1 year-old			
	Shelterbelt	2	1	20

^{*} 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%.

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.

GENERAL DIRECTIONS

Weeds controlled: SIMAZINE controls the following weeds:

Broadleaves: Lady's Thumb, Lamb's quarters, Purslane, Ragweed, Volunteer clovers, Wild buckwheat, Smartweed.

Annual Grasses: Barnyard grass, Crabgrass, Wild oats, Yellow foxtail. SIMAZINE will also control most perennial species starting freshly from seed.

Mixing: Mix by adding the recommended amount of SIMAZINE to the spray tank while filling with clean water. Gentle agitation is required during mixing and spraying.

Spraying: Spray at pressures of 200-300 kPa. Use nozzle screens of 50 mesh size or larger. Keep SIMAZINE mixture well agitated and spray evenly to cover the surface to be treated. After any break in the spraying operations, agitate thoroughly. After using, wash sprayer thoroughly with clean water.

PRECAUTIONS

SIMAZINE is a residual herbicide. Use the lower rates for coarse, sandy soil and the higher rates for clay soils and soil high in organic matter. After spraying with SIMAZINE do not plant any crop in the treated area in the same year except corn. Sugar beets are sensitive to SIMAZINE and should not be planted on land treated with SIMAZINE the previous year, if rotation is planned for the following year.

Observe these precautions:

- 1. Where rates in excess of 3.65 L/ha have been applied, do not plant rotational crops the following year.
- 2. Thorough tillage, including ploughing the land flat as opposed to setting the furrow on edge, should precede the planting of any rotational crop.
- 3. Uneven application of SIMAZINE may result in injury to succeeding crops.
- 4. When extended periods of dry weather occur during the year of treatment, there can be some injury to such succeeding crops as white beans, onions, peas, tomatoes, and turnips. Injury is most likely to occur when the seedling crop is subjected to periods of stress, eg: during periods of abnormally hot, dry weather. When the directions outlined on this label are followed, injury to these crops is unlikely to occur under normal weather conditions.
- 5. Where rainfall is sufficient to cause erosion, soil containing SIMAZINE may wash to lower areas of land and injure existing or subsequent crops.
- 6. Do not graze, or cut for fodder, treated immature crops (In the case of corn, immature means before ear emergence). There are not sufficient data available to support such use. See other cautions for specific crops.
- 7. DO NOT APPLY BY AIR.

Wear coveralls over a long-sleeved shirt and long pants, and chemical-resistant gloves during mixing/loading. Wear a long-sleeved shirt and long pants during application, cleanup and repair. In addition, wear chemical-resistant gloves and a NIOSH-approved respirator with a dust/mist filter during application using handheld equipment.

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

Users should remove clothing immediately if pesticide comes in contact with skin through soaked clothing or spills. Then wash skin thoroughly and put on clean clothing. Wash contaminated clothing before reuse.

Users should remove personal protective equipment immediately after handling this product. Wash the outside of the gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's website at: www.croplife.ca.

SPECIFIC CROPS

APPLES AND PEARS: Bearing and non-bearing: Trees established one year or more. Apply 4.7-9.4 L in 300 L of water/ha prior to weed emergence in the spring. If weeds have emerged, hoe or cultivate prior to treatment.

LOGANBERRY: Established plantings only: Apply 7-11.2 L in 300 L of water/ha at base of canes in early spring prior to new cane growth.

RASPBERRIES: (Red) Established plantings only: Apply 3.8-4.7 L in 300 L of water/ha at base of canes in early spring. Do not spray young shoots.

GRAPES: Eastern Canada only. Only for vineyards established 3 years or more. Broadcast 7.5-9.4 L in 300 L of water/ha in fall or early spring prior to weed emergence. On light soils use 7.5 L/ha. On clay soils or soils high in organic matter use 9.4 L/ha.

ASPARAGUS: Established plantings only. Apply 4.7-7 L in 300 L of water/ha after discing in spring prior to weed and spear emergence and at least 7 days before first cutting. A second application may be applied after harvest completion if weeds are removed. Do not apply during cutting season.

WOODY ORNAMENTALS and NURSERY STOCK: Established one year or more. To control germinating weeds in Cedar (Arbor Vitae, *Thuja* spp.) Barberry, Apple (nonbearing), Flowering crabapple (*Malus* spp.) Boxwood, Cotoneaster, Dogwood, Holly, Rose, Yews (*Taxus* spp.), Chamaecyparis, Hemlock, Juniper, Multiflora rose, Peony,

Blue spruce, Norway spruce, Red spruce, White spruce, Mugho pine, Black walnut, White ash. Apply 4.7-7 L in 300 L of water/ha in the fall or spring prior to weed emergence. Rainfall is required to move the chemical into the root zone. If weeds have emerged, hoe or cultivate before application.

Apply before buds break in spring. Apply as a directed spray only. Avoid spray contact with desired woody ornamental and nursery stock. Use 4.7 L for sandy or low organic matter soils. Use 7 L for clay or high organic matter soils.

NOTE: Do not use treated areas for nursery seed beds or cutting beds for at least 12 months after treatment. If application was uneven, or, if rates in excess of those recommended have been applied, a longer period should elapse before such use.

SHELTER BELTS: Established one growing season or more: Caragana, Green ash, Siberian elm, American elm, and Boxelder maple. Apply 9.4-14 L in 500 L of water/ha before weeds emerge. Apply in fall or early spring. Use as a directed spray only. Avoid spray contact with desired species. Injury may occur to trees grown in saline soils. Rainfall is required to move the chemical into the root zone.

CORN: Soil Preparation: As SIMAZINE is a residual herbicide even coverage of the soil surface is essential for good weed control. SIMAZINE should be applied to a firm, level seedbed. If the seedbed is rough or cloddy roll or cultipack before spraying.

Maximum application rates for sweet corn:

Uses	Maximum rate per application (kg. a.i./ha)	Maximum number of application per year
For application on soils that are not highly erodible or on highly erodible soil if at least 30% of the soil is covered with plant residues	2.25	1
For application on highly erodible soil if less than 30% of the soil is covered with plant residues	1.79	1

Cultivations: SIMAZINE requires rainfall to be activated. If some seedlings escape the treatment in dry weather, a shallow cultivation may be necessary.

Time of Application: Apply SIMAZINE immediately after seeding, prior to weed emergence and not later than 3-4 days after seeding. SIMAZINE may also be applied one week before seeding and incorporated to a depth of 2.5 cm.

Mixing Instructions: Follow mixing instructions with water as outlined above.

APPLICATION RATE PER HECTARE	Soil Type	Overall Spray
	Light and Sandy	3.4-4.7 L
	Loam and Clay	4.7-8.3 L

NOTE: Where grass weeds predominate, use the 8.3 L rate

NOTE TO USER:

READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS:

The DIRECTIONS FOR USE for this product for the use(s) described below were developed by persons other than Loveland Products Canada Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Loveland Products Canada Inc. itself makes no representation or warranty with respect to performance (efficacy) or crop tolerance (phytotoxicity) claims for this product when used on the crop(s) listed below.

Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold Loveland Products Canada Inc. harmless from any claims based on efficacy or phytotoxicity in connection with the use(s) described below.

DIRECTIONS FOR USE

Conifers for Outdoor field production

For control of annual and perennial grasses and broadleaf weeds, apply 4.7 to 7.0 L of Simazine 480 Herbicide in tank mix with 1.875 L of Vantage Plus Max II (equal to 2.5 L of Vantage Plus) in 300 L of water per hectare banded on either side of tree rows, contacting the bottom foliage only.

The lower rate (4.7 L/ha) of Simazine 480 is for use in sandy or low organic matter soils and the higher rate (7.0 L/ha) for use in clay or high organic matter soils. Use only one post emergent application per season. Adjust the rate accordingly for the band width.

Tolerance of new or established plantings of Balsam Fir, Fraser Fir, White Pine, and White Spruce have been found to be acceptable when the tank mix of Simazine 480 Herbicide + Vantage Plus Max II is applied as directed. Since not every species of conifer for outdoor field production has been tested for tolerance to the tank mix, first use of the tank mix should be limited to a small area of each species to confirm tolerance prior to adoption as general field practice. Additionally, consult your plant supplier for information on the tolerance of conifer species for outdoor field production to the tank mix treatment.

Refer to the Vantage Plus Max II label for use instructions, specific weed claims, and precautions

Pest	When to Apply	Rate	Remarks
All weeds listed on the labels of Simazine 480, Dual Magnum Herbicide or Dual II Magnum Herbicide	Pre-emergent or early post emergent (before 2-leaf stage) to weeds	4.7-7.0 L Simazine + 1.25-1.75 L Dual Magnum or Dual II Magnum Herbicide tank mix in 150 L of water per hectare	The lower rate (4.7 L/ha) of Simazine for use in sandy or low organic matter soils and 7.0 L/ha for use in clay or high organic matter soils Higher rate of Dual Magnum or Dual II Magnum Herbicide for use with heavier weed infections One ground application per year

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 the clean-up of spills.

NOTICE TO USER: This pest 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.

Base

SIMAZINE 480 HERBICIDE SOLUTION COMMERCIAL



CAUTION POISON

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING
KEEP OUT OF REACH OF CHILDREN

GUARANTEE: Simazine and Related triazines 480g/L Contains 1,2-benzisothiazolin-3-one at 0.010% as a preservative.

REGISTRATION NO. 23181 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 9.46 L

LOVELAND PRODUCTS CANADA INC. 789 Donnybrook Drive Dorchester, Ontario N0L 1G5 1-800-328-4678

12/2010