# SIMANEX 80W (SIMAZINE)

GROUP 5 HERBICIDE

# **COMMERCIAL**

Formulation of Simazine Herbicide

### Wettable Powder for:

Weed control in certain fruit crops, asparagus, woody ornamentals and nursery stock, shelter belts, woodland and Christmas trees, birdsfoot trefoil, corn and non-selective weed control on non-crop land.

## **GUARANTEE:**

READ THE LABEL BEFORE USING KEEP OUT OF REACH OF CHILDREN

REGISTRATION NO. 14274 PEST CONTROL PRODUCTS ACT

Makhteshim-Agan of North America Inc. 551 Fifth Avenue, Suite 1100 New York, NY 10176

Net Contents 2.27 kg

#### DIRECTIONS FOR USE

#### **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 80W will also control most perennial species starting freshly from seed.

**Perennials:** Broadleaf and grass weeds at industrial rates for spot treatment or on non-crop land: quackgrass, burdock, Canada thistle, orchardgrass, purple top, smooth brome, dog fennel, bull thistle, sow thistle.

Triazine Tolerant Weeds

Following many years of continuous use of this product and chemically related products, biotypes (strains) of some of the weeds listed on this label have been reported which cannot be effectively controlled by this and related herbicides. Where this is known or suspected, we recommend the use of this product in combination with other registered herbicides which are not triazines and are labelled to control these resistant weeds. Consult with your Provincial Agricultural Extension Representative for specific recommendations.

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

**Spraying:** Spray at pressures of 200-250 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. Use sufficient water for thorough coverage. After any break in the spraying operation, 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 80W, do not plant any crop in the treated area in the same year except corn. If rotation is planned for following year, observe these precautions:

- 1. Where rates in excess of 2.25 kg per hectare have been applied, do not plant rotational crops within one year of application.
- 2. Thorough tillage, including plowing the land flat as opposed to setting the furrow on edge, should precede the planting of any rotational crop.
- 3. Uneven application or application in excess of recommended rates 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 such as white beans, onions, peas, tomatoes and turnips. Injury is most likely to occur when the seedling crop is subjected to periods of stress, e.g., 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.

Additional Precautions for General Use:

- 1. Rainfall is required to move the chemical into the root zone of weeds.
- 2. If application is made pre-emergence, rainfall is required for activation.

If there is no rainfall for a period of time, a light cultivation may be required to control the first flush of weeds.

- 3. Apply in spring before weed emergence unless specific crop directions differ.
- 4. Do not apply when ground is frozen or covered with snow.

See other cautions for specific crops.

DO NOT APPLY BY AIR

#### RESISTANCE-MANAGEMENT RECOMMENDATIONS:

For resistance management, Simanex 80W is a Group 5 herbicide. Any weed population may contain or develop plants naturally resistant to Simanex 80W 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 Simanex 80W 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 (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 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 Makhteshim-Agan of North America Inc. at 1 212 661-9800.

#### SPECIFIC CROPS

**APPLES AND PEARS (bearing and non-bearing) (Trees established one year or more):** Apply 2.75-5.5 kg in 300 litres of water per hectare prior to weed emergence in the spring.

**LOGANBERRY** (Established plantings only): Apply 4.25-6.75 kg in 300 litres of water per hectare as a directed spray at base of canes in early spring prior to new cane growth.

**RASPBERRIES (RED) (Established plantings only):** Apply 2.25-2.75 kg in 300 litres of water per hectare as a directed spray at base of canes in early spring. Do not get spray on young shoots.

**GRAPES (Eastern Canada only) (For use only in vineyards established 3 years or more):** Broadcast 4.5 to 5.5 kg in 300 litres of water per hectare in fall or early spring prior to weed emergence. On light soils, use 3.25 kg per hectare.

**ASPARAGUS (Established plantings only):** Apply 2.75-4.25 kg in 300 litres of water per hectare, 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 after weeds are removed. Do not apply during cutting season.

WOODY ORNAMENTALS AND NURSERY STOCK (Transplants established one year or more) (To control germinating weeds in: cedar, Arborvitae (Thuja spp.), barberry, apple (non-bearing), 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 2.75-4.25 kg in 300 litres of water per hectare in the fall or spring prior to weed emergence. If weeds have emerged, hoe and cultivate before application. Apply with an efficient sprayer to obtain an even cover on the surface to be treated. Apply before buds break in spring.

**NOTE:** Do not use treated areas for nursery seed beds or cutting beds for at least 12 months after treatment. If rates were used in excess of those recommended due to uneven application, a longer period should elapse before such use.

SHELTER BELTS (Established one year or more) (Caragana, green ash, Siberian elm, American elm and Manitoba maple): Apply 5.5-8.0 kg in 500 litres of water per hectare before weeds emerge. Apply in fall or early spring. Injury may occur to trees grown in saline soils.

WOODLAND AND CHRISTMAS TREE PLANTINGS (Less than 500 ha.) (New or established plantings of white pine and balsam fir [2 year stock or older]):

Rate of Simazine 80W per hectare of trees:

Row Spacing	<u>60 cm Band</u>	90 cm Band
1.8 meters	1.75-2.75 kg	2.75-4.00 kg
1.5 meters	2.25-3.25 kg	3.25-5.25 kg
1.2 meters	2.75-4.00 kg	4.00-6.00 kg

Apply 5.5-8.0 kg. in 300 litres of water per hectare of ground treated. Apply in a band centered over the rows. Application may be made directly over trees. Apply in spring prior to the start of weed growth or in fall prior to freeze up. The fall application will provide control the following spring. If weeds have emerged, control of vegetation will be delayed and treatment may be unsatisfactory. Apply with an efficient sprayer to obtain an even cover of the surface to be treated.

Note: Use the higher rate where there are heavy infestations of perennial grasses, e.g., quackgrass, as well as on clay soils high in organic matter.

**BIRDSFOOT TREFOIL (In established fields only for hay, pasture and seed production):** To prevent fall germinating broadleaf weeds, grass and legume seedlings. Apply only in September to November, prior to freeze up, 1.5 kg in 300 litres of water per hectare. Weeds will be controlled in the season following treatment. Do not overlap. May be applied in the fall of the year of seeding if the trefoil population is at least 5 plants per 10 square centimeters and if plants are at least 15 centimeters high.

#### GRAZING OR HARVESTING FOR FEED:

Do not graze for 30 days or cut for hay within 60 days of application.

Do not treat the same field with Simazine for more than 3 consecutive years. Do not plant sugar beets on land treated the previous year. Do not apply paraquat within one year after the Simazine application.

#### CORN (FIELD & SWEET):

**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, loose or cloddy, it must be rolled or cultipacked before spraying in order to obtain a level, compact surface.

**Cultivations:** Simazine requires rainfall to be activated. If some seedlings escape the treatment in dry weather, a shallow cultivation at lay-by (when corn is 30 to 45 cm tall) may be necessary.

**Time of Application:** Apply Simazine 80W immediately after seeding, prior to weed emergence and not later than 3 to 4 days after seeding. Simazine may also be applied during the week before seeding and incorporated into the soil by discing to a depth of 2.5 cm.

Mixing Instructions: Following mixing instructions with water as outlined previously.

#### **Application Rate:**

Soil TypeOverall SprayLight and Sandy2.00 kgLoams and Clays2.75 kg

Note: Where grass weeds predominate or an unusually heavy infestation of broadleaf weeds is expected, use the 2.75 kg rate.

NON-CROP LAND (AGRICULTURAL AND INDUSTRIAL USE) For total weed control: Apply 15.0-27.5 kg in 250-2000 litres of water per hectare or 150 to 300 grams in 2.5-25 litres of water per 100 square meters. For annual weeds and perennial seedlings, use the lower rate. For light growth of shallow-rooted perennials, use the intermediate rate. For well-established perennials use the higher rate. In Eastern Canada, a fall application of the intermediate rate will adequately control all weeds. Apply with an efficient sprayer to obtain an even cover of the land to be treated. Use the higher volumes of water where old vegetation is dense or obstructions frequent. Rainfall is required to move the chemical into the root zone.

COASTAL BRITISH COLUMBIA: Apply January to March to control annual and perennial weeds.

PRAIRIES, INTERIOR BRITISH COLUMBIA, AND THE LAKEHEAD AREA: Apply August to freeze-up to control perennial weeds.

**ONTARIO**, **QUEBEC:** Apply mid-September until freeze-up, or from spring thaw to May to control perennial weeds. Apply from spring thaw to end of June to control annual weeds.

MARITIMES: Apply from October to freeze-up, or from spring thaw to end of June to control annual weeds.

When soil moisture is plentiful, spring treatments in Eastern Canada can be extended a further month. Some weeds such as horsetail, milkweed and sedges may require more than one treatment to give effective control. Higher than normal doses may be required on cinders and surfaces rich in organic matter.

**Note:** Foaming (due to excessive agitation) may be eliminated by the addition of kerosene, diesel fuel, fuel oil or other similar materials at about 500 grams per 100 litres of spray. More may be required in very low volume spraying.

**FARM (Total Vegetation Control):** Apply 25-40 grams in 5-10 litres of water per 10 square meters for spot treatment. For quickest results, treat before or during emergence of weeds, or shortly thereafter. Apply uniformly as a spray.

This treatment will control most annual and perennial weeds. Excessively dry soil conditions and absence of a rainfall may result in poor weed control.

#### **PRECAUTIONS**

**KEEP OUT OF REACH OF CHILDREN.** Harmful if swallowed or inhaled. Avoid breathing dust or spray mist. Avoid contact with skin, eyes and clothing. No residue tolerance established for fish. Do not contaminate any body of water. Do not contaminate foods or feeds. After using, wash sprayer thoroughly with clean water. Do not reuse empty container. Wear a long-sleeved shirt, long pants, goggles or faceshield and chemical resistant gloves during mixing, loading, application, clean up and repair.

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. contact 1 866 375-4648 or <a href="https://www.cropro.org/">www.cropro.org/</a>

#### FIRST AID INSTRUCTIONS

If inhaled move to an area with fresh air, clean up and rest. If swallowed, immediately give large quantities of water and INDUCE VOMITING. Never give anything by mouth to an unconscious person. Obtain medical attention or contact a poison control centre IMMEDIATELY. If in eyes, flush with large amounts of clean water for at least 15 minutes. Obtain medical attention or contact a poison control centre IMMEDIATELY. If on skin, remove contaminated clothing immediately. Wash skin thoroughly with soap and water. If irritation occurs obtain medical attention or contact a poison control centre, IMMEDIATELY.

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

## TOXICOLOGICAL INFORMATION: Treat symptomatically.

#### DECONTAMINATION AND DISPOSAL

- 1. Triple rinse the empty container. Add the rinsing to the spray mixture in the tank.
- 2. Follow provincial instruction for any required additional cleaning of the container prior to its disposal.
- 3. Make the container unsuitable for further use.
- 4. Dispose of the container in accordance with provincial requirements.
- 5. 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.

#### 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 a control product under unsafe conditions.

#### NOTICE TO BUYER

Seller's guarantee shall be limited to the terms set out on the label, and subject thereto, the buyer assumes the risk to persons or property arising from the use or handling and of this product and accepts the product on that condition.

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