

Sinbar[®]WDG

Agricultural Herbicide

FOR SALE FOR USE ON APPLES, PEACHES, STRAWBERRIES, Highbush blueberries, lowbush blueberries, asparagus, fruit trees, spearmint and peppermint crops, and raspberries.

AGRICULTURAL

READ THE LABEL AND BOOKLET BEFORE USING

GUARANTEE: Terbacil 80%

Warning, contains the allergen sulfites.

REGISTRATION NO. 30082 PEST CONTROL PRODUCTS ACT



WARNING – POISON

NET CONTENTS: 2 - 25 kg

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PRECAUTIONS

- **KEEP OUT OF REACH OF CHILDREN.**

- Harmful or fatal if swallowed.
- May irritate eyes, nose, throat and skin.
- Do not apply by air.
- Do not get in eyes, on skin or clothing.
- Avoid breathing dust or spray mist.
- Wash hands thoroughly after handling.
- Wash clothing after use.
- Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.
- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Mixers, loaders, applicators, spray tank cleaners and other handlers must wear long-sleeved shirt and long pants, shoes, socks and protective eyewear.
- Do not enter or allow entry into treated areas within 12 hours after application.
- It is recommended that this product not be applied in a way that will contact workers or other persons, either directly or through drift. Only handlers wearing personal protective equipment may be in the area during application.
- Apply only when the potential for drift to areas of human habitation or activity such as houses, cottages, schools and recreational areas is minimal, taking into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

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/

FIRST AID:

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.

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 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.

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

TOXICOLOGICAL INFORMATION:

Treat symptomatically.

IMPORTANT—WILDLIFE AND HABITAT PROTECTION

Injury to or loss of desirable trees or other plants may result from failure to observe the following:

Do not apply (except as recommended for crop use), or drain or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots. Do not use on lawns, walks, driveways, tennis courts, or similar areas. Do not use in home fruit plantings nor in apple or peach orchards interplanted with other trees or desirable plants. Do not contaminate domestic, natural or artificial bodies of water and do not rinse equipment in such waters. Keep from contact with fertilizers, insecticides, fungicides, and seeds.

Overspray or drift to important wildlife habitats such as shelterbelts, wetlands, sloughs or dry slough borders, or woodlots, should be avoided. Leave a 20 metre buffer zone between the last spray swath and the edge of any of these habitats.

RESTRICTIONS AND PRECAUTIONS:

Carefully observe sprayer clean-up instructions, as spray tank residue may damage crops other than blueberries.

Do not apply **SINBAR® Herbicide WDG** with a carrier other than water or any additive other than those indicated on this label. Other carriers may accelerate breakdown of this product and reduce its effectiveness.

SINBAR® Herbicide WDG applied to crops stressed by severe conditions such as drought, low fertility, water logged soils (soils at or near field capacity), disease, or insect damage, may result in crop injury, grade or yield loss.

- Do not tank mix **SINBAR® Herbicide WDG** with VENTURE L Herbicide. Do not apply **SINBAR® Herbicide WDG** within the 2 weeks before or after an application of VENTURE L Herbicide or crop injury may result.
- Do not apply to irrigated land where tail water will be used to irrigate other crop land.
- Do not contaminate irrigation water.
- Do not remove soil from treated fields for use on lawns or in gardens.
- Do not exceed maximum use rate indicated in the crop section of this label.
- Use spray preparation of **SINBAR® Herbicide WDG** within 24 hours or product degradation may occur. If spray preparation is left standing without agitation, thoroughly agitate and resuspend the mixture before spraying.

DIRECTIONS FOR USE

SINBAR® Herbicide WDG is primarily a soil residual herbicide that is absorbed through the roots of the unwanted plants. Soil type and organic matter impact the rate of **SINBAR® Herbicide WDG** required to achieve weed control. Consult the specific crop section for complete details on soil types and use rates.

SINBAR® Herbicide WDG should be used only in accordance with recommendations on this label or in separate published Tessenler Kerley, Inc. recommendations available through local dealers.

SINBAR® Herbicide WDG is a wettable granule to be mixed in water and applied as a spray for selective weed control in strawberries, blueberries, first year fruit trees (apple, apricot, cherry, peach, pear and plum), asparagus, raspberries, and in apple and peach orchards where trees have been established for at least 3 years. It is non-volatile, non-flammable, and non-corrosive to equipment. **SINBAR® Herbicide WDG** controls annual weeds such as barnyardgrass, bluegrass, crabgrass, foxtail, chickweed, downy brome (cheatgrass), perennial rye grass, wild barley, mustard, prickly lettuce, stinkweed, annual sowthistle, henbit, lamb's-quarters, pigweed, purslane, and ragweed; in addition, treatment usually provides partial control of quackgrass, horsetail, and yellow nutsedge. Treatment will not control established perennial weeds such as bindweed and Canada thistle. Best results are obtained if application is made shortly before or shortly after weed growth begins; if dense growth is present, remove tops and spray the ground. Control of perennial grasses may be improved by cultivation prior to treatment; otherwise, avoid working the soil as long as weed control continues or else effectiveness of the treatment may be reduced.

Moisture is necessary to activate the chemical; best results are obtained if moisture is supplied by rainfall or irrigation within two weeks after application. The degree of control and duration of effect will vary with the amount of chemical applied, soil type, rainfall and other conditions.

Apply uniformly with a properly calibrated fixed-boom power sprayer using a minimum of 200 L of water per ha. Spray booms must be shut off while starting, turning, slowing, or stopping or injury to crop may result. Continuous agitation is required to keep the material in suspension.

Do not use on soils containing less than 1% organic matter, nor on gravelly soils or eroded areas where subsoil or roots are exposed, nor on plants that are diseased or lacking in vigour, as injury to the plants may result.

CROPS

APPLES AND PEACHES

Use only where apple and peach trees have been established in the orchard for at least 3 years. Apply as a band or broadcast treatment to ground beneath and/or between trees.

Dosages are expressed as broadcast rates; for band treatment, use proportionately less. Make a single application per year. On soils containing 1% to 2% organic matter, use 2.25 kg per ha on sandy loams and 3.25 kg per ha on silt loams. Where organic matter is over 2%, use 3.25–4.5 kg/ha.

Do not spray foliage nor treat trees planted in irrigation furrows as injury to trees may result. Where crop is grown under flood or furrow irrigation, apply only as a band treatment under the tree row.

STRAWBERRIES

Planting Year—Apply 275–550 g per ha after mother plants are well established (usually 4–6 weeks after planting but before new runner plants start to root). In Eastern Canada, if the low rate has been used, a booster application of 275 g/ha may be required in the late summer or early fall to maintain weed control until late fall. To extend weed control through harvest of the following year, apply 850 g–1 kg/ha just before late fall mulching. In areas of periodic winter injury, reduce late fall application to 550–700 g/ha.

Make a maximum of three applications of **SINBAR® Herbicide WDG** throughout the planting year.

Harvest Years—In Eastern Canada, a single application of 275–350 g/ha may be applied in the early spring immediately after mulch removal to supplement or to replace the late fall application. Apply before new plant growth starts in the spring. Plants which have made weak growth under the mulch are subject to serious injury.

After renovation, (after rototilling, if rows are narrowed by rototilling) apply 700–850 g/ha (Western Canada, 350–530 g/ha). To extend weed control through harvest of the following year, apply a second application of 700–850 g/ha just before mulching in the late fall. In areas of periodic winter injury, reduce late fall application to 550–700 g/ha. Make a maximum of 2 applications per year following rototilling or renovation.

PRECAUTIONS FOR USE IN STRAWBERRIES:

Do not overlap spray swaths. Accurate calibration of equipment is essential to avoid crop injury. Use at least 300 L of water/ha.

Strawberry varieties vary in their sensitivity to **SINBAR® Herbicide WDG**, Redcoat and Veestar tend to be relatively tolerant. Use the lower of the recommended rates on sensitive varieties such as Earlidawn, Kent, Midway, Bounty, Micmac or varieties which have not been adequately tested for **SINBAR® Herbicide WDG** sensitivity. On new varieties, use **SINBAR® Herbicide WDG** on a limited area to determine safety before larger scale treatments are adopted.

Use the lower of the recommended rates on sandy soil with low organic matter.

Temporary minor foliage injury may occur after application. Use only on healthy vigorous plants. Weak, diseased or injured plants are subject to serious injury. Risk of strawberry plant injury is reduced if 1–2 cm of rain or irrigation follows immediately after application.

Treatments may be expected to suppress or control quackgrass, but not established dandelion.

BLUEBERRIES

Use only in blueberry plantings established in the field for at least 1 year. Make one application per year. Recommended for control of certain grasses and broadleaf weeds in Lowbush and Highbush Blueberries, such as: bluegrass, sheep sorrel, buttercup, sedges, plantain, lady's thumb, fireweed, ragweed, wild radish and fall dandelion. Treatment will not control hardhack (*Spiraea*).

LOWBUSH BLUEBERRY: Make only one application per year. If the one application is made in Spring, apply 1.5-2.5 kg **SINBAR® Herbicide WDG** per ha in a minimum of 200 L water/ha (broadcast) in the spring of the non-bearing year following pruning but before blueberry emergence. If the one application is made in Fall, apply 1.5 - 2.5 kg **SINBAR® Herbicide WDG** in a minimum of 200 L water/ha in late fall when blueberries are dormant.

HIGHBUSH BLUEBERRY: Make only one application per year. Apply 2.75 - 4.25 kg **SINBAR® Herbicide WDG** per ha as a directed spray to the base of the plants in the spring prior to weed growth. Use the high rate on muck or peat soils. In British Columbia only, 5.5 L/ha of GRAMOXONE* Weed Killer may be tank mixed with **SINBAR® Herbicide WDG** to improve early results and extend control if weeds have emerged. Do not apply later than 80 days before harvest.

FIRST YEAR FRUIT TREES (apple, apricot, cherry, peach, pear, plum):

For control of annual weeds in first year fruit trees, apply **SINBAR® Herbicide WDG** at 1.25 kg/ha by field sprayer. Use 150–300 L of water per hectare. Make one application per season.

DO NOT use on soils coarser than sandy loams with less than 3% organic matter.

NOTE: control of pigweed may be inconsistent with this treatment.

ASPARAGUS

DIRECT SEEDED:

Plant asparagus seed into newly cultivated fields, where no weeds have emerged. Asparagus seed should be planted at a depth of 4 cm in coarse (sandy) soils, or 2.5 cm deep in fine (clay) soils. Within 2 days of planting, apply a preemergent broadcast application of **SINBAR® Herbicide WDG** at a rate of 375 g/ha.

ESTABLISHED BEDS:

Apply 375 g/ha of **SINBAR® Herbicide WDG** prior to spear emergence. Application may be made immediately after clean cutting. **SINBAR® Herbicide WDG** must only be applied to established asparagus beds once throughout the entire growing season.

Apply before annual weeds emerge, or to small, actively growing weeds (up to 5 cm tall or across).

Do not use on soils containing less than 1% organic matter, or on areas where subsoil or roots are exposed. Crop injury may occur if **SINBAR® Herbicide WDG** is used on plants that are weak or diseased, or lacking in vigour (slow growing).

Do not harvest within 5 days of treatment. Treated areas may be replanted to asparagus the following year after application. See "NOTE—REPLANTING" section for further details.

RASPBERRIES

For use in raspberry plantings which have been established for a minimum of 1 year. Best results are obtained if application is made before annual weeds emerge, or to small, actively growing weeds (up to 5 cm tall or across).

Apply **SINBAR® Herbicide WDG** as a single band or broadcast application at 0.41–0.84 kg/ha plus DEVRINOL* at 4 kg/ha pre-emergent in a minimum of 200 litres of water. Dosages are expressed as broadcast rates; for band treatment, use proportionately less. Application should be directed below the canes in the fall, or early spring before fruitset. Make only one application of this tankmix per growing season.

For use only on soils with a range of 8–10% organic matter.

High organic soils adsorb **SINBAR® Herbicide WDG** so that it is substantially inactivated as a soil residual herbicide. On these soil types, weed control is provided by postemergent foliar uptake only.

DO NOT:

- spray crop foliage
- spray on eroded areas where subsoil or roots are exposed
- apply to raspberry plants that are weak or diseased
- apply within 70 days before harvest

NOTE TO BUYER/USER:

READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR SPECIAL USE APPLICATIONS.

The Directions for Use for this product for the use described below were developed by persons other than Tessenderlo Kerley, Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion Program. Tessenderlo Kerley, Inc. itself makes no representation of warranty with respect to product performance (efficacy) and crop tolerance (phytotoxicity) of this product when used on the crop below. Accordingly, the Buyer and User assume all liability arising, and agree to hold Tessenderlo Kerley, Inc. harmless from any claims based on efficacy or phytotoxicity in connection with this use described below.

ESTABLISHED FRUIT TREES (apple, peach, pear, sweet and sour cherry)

SINBAR® Herbicide WDG may be tank mixed with LEXONE® DF Herbicide to provide broad spectrum weed control in established fruit trees. Apply **SINBAR® Herbicide WDG** at 0.63 kg/ha plus LEXONE® DF at 1.0 kg/ha in 150–300 L of water per hectare as a pre-emergent treatment.

Apply as a band under the trees and make only one application per year. This tank mix will control:

Grass Weeds	Broadleaf Weeds
Barnyardgrass, Crabgrass, Green foxtail, Wild barley, Bluegrass, Fall panicum, Johnson grass (seedling), Witchgrass, Cheatgrass, Giant foxtail, Perennial rye grass, Yellow foxtail (Downy brome)	Annual sowthistle, Henbit, Prickly mallow, Shepherd's-purse, Common chickweed, Jimsonweed, Prostrate pigweed, Stinkweed, Common ragweed, Lady's-thumb, Purslane, Velvetleaf, Dandelion, Lamb's-quarters, Redroot pigweed, Wild mustard (seedling), Green smartweed, Prickly lettuce, Russian thistle, Yellow wood-sorrel. Treatment usually provides partial control of quackgrass, horsenettle, and yellow nutsedge.

DO NOT use on soil coarser than sandy loams with less than 3% organic matter.

SPEARMINT AND PEPPERMINT CROPS

SINBAR® Herbicide WDG provides broad-spectrum weed control in spearmint and peppermint crops. Apply at the rate of 1.75 kg/ha with a preharvest interval of 9 to 10 months. Make only one application of **SINBAR® Herbicide WDG** per crop season from the end of September to the beginning of October. Please refer to other sections of this label for the list of weeds controlled as well as additional application instructions and/or use precautions.

For field sprayer application:

- **DO NOT** apply during periods of dead calm or when winds are gusty.
- **DO NOT** apply with spray droplets smaller than the American Society of Engineers (ASAE) medium classification.
- **DO NOT** apply by air.

Buffer Zones

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, pastures, rangelands, 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	Buffer zones (metres) required for the protection of:			
	Terrestrial habitat	Aquatic habitat at water depths		
		< 1 m	1 – 3 m	> 3 m
Field sprayer	35	10	4	2
Field sprayer with cones	25	5	3	1
Field sprayer with shrouds	10	3	1	0

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.

MIXING INSTRUCTIONS:

1. Fill spray tank 1/4 to 1/3 full with fresh water. Use 150–300 L water per hectare (or as indicated under specific crop sections of this label).
2. Add the required amount of **SINBAR® Herbicide WDG** to the tank with the agitator running. Continuous agitation is required for uniform suspension and application.
3. Fill the remainder of the tank with water.
4. For repeat tankloads, reduce the volume in the tank to 10% or less of the original volume before proceeding with step 1. If this is not possible, pre-slurry **SINBAR® Herbicide WDG** in a small amount of water (5–10 L) before adding to the tank.

Apply the spray mixture uniformly with properly calibrated ground equipment only. Ensure thorough coverage and a uniform spray pattern. Flat fan nozzles are recommended. Use 50 mesh filter screens or larger (metal or nylon). Continuous agitation is required to keep **SINBAR® Herbicide WDG** in suspension. Apply uniformly and avoid overlapping. Shut off spray boom while starting, turning, slowing or stopping to prevent crop injury from over application.

ENVIRONMENTAL HAZARDS:

- The use of this chemical may result in the contamination of groundwater particularly in areas where soils are permeable (e.g. sandy soil) and/or the water table is shallow.
- 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). Avoid application of this product when heavy rain is forecast.
- Observe buffer zones specified under “Directions for Use.”

MANAGEMENT OF SPRAY DRIFT:

- When applying **SINBAR® Herbicide WDG** near adjacent, sensitive, crop and/or plants, do everything possible to reduce the potential for spray drift.
- High temperature, drought and low relative humidity increase the potential for spray drift. Extreme caution must be used when these conditions exist.

GROUND AND SURFACE WATER PROTECTION:

- Do not apply directly or allow product to visibly drift on to water or wetlands. Do not apply where runoff from treated area will contaminate water or within 10 metres of permanent water. Do not mix, load or clean spraying equipment within 20 metres of any body of water. Do not mix, load or clean spraying equipment within 20 metres of a well unless on an impervious pad to prevent groundwater contamination. Prevent well contamination from backsiphoning when filling spray tank by use of an antisiphoning device or an air break between water hose and spray tank contents.
- Do not apply **SINBAR® Herbicide WDG** during periods of intense rainfall or to areas where surface water could run off to adjacent land or water bodies, including ditches and streams.
- Observe provincial regulations and guidelines that regulate treatments around water bodies and well sites.

SPRAY TANK CLEANING:

Immediately following application, drain spray equipment. Thoroughly rinse sprayer and flush the hoses, boom and nozzles with clean water. Loosen and physically remove visible deposits. Remove and clean nozzles, screens, strainers. Flush the entire system with clean water. Clean all other associated application equipment. Refer to appropriate sections for personal protective equipment and environmental precautions.

STORAGE:

Store product in original container in a secure, dry, well ventilated area away from fertilizer, seed, pesticides, food or feed. Not for use or storage in or around the home. Keep container tightly closed.

DISPOSAL:

1. Triple- or pressure-rinse the empty container. Add the rinsings 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 empty 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.

NOTE—REPLANTING

Do not replant treated areas to any crop within 2 years after the last application as injury to subsequent crops may occur. To reduce replanting injury to subsequent crops, cultivate or plough soil thoroughly.

FIELD BIOASSAY

Select a representative area or areas of the field previously treated with **SINBAR® Herbicide WDG** to plant your bioassay crop(s). Be sure to consider factors such as size of field, soil texture, drainage and turn-around areas when selecting the site(s) that are most representative of the soil conditions in the field. On large fields, more than one site may be needed in order to obtain reliable results.

Plant the test strips perpendicular to the direction in which the field was sprayed. The strips should be long enough to cross the width of several spray swaths. Large test strip areas are more reliable than small ones.

Use standard tillage and seeding equipment to plant the bioassay. Prepare a seed bed and plant the crops and varieties you want the option of growing the following year. It is important to use the same planting time, conditions, techniques and cultural practices you normally use to plant and grow the bioassay crop(s). Also plant into an adjacent area not treated with **SINBAR® Herbicide WDG** to use as a comparison.

As the crop(s) emerges and grows, examine these key points in **SINBAR® Herbicide WDG** treated and non-treated areas:

Crop stand	Rate of growth	Yield
Root development	Plant colour and vigour	

Allow the bioassay crop(s) to grow to maturity while making your observations. Do not overspray the test strips with herbicides that may damage the bioassay crop(s). If the bioassay indicates that **SINBAR® Herbicide WDG** residues are still present, continue cropping only to those crops listed on the label and do not rotate to other crops until bioassay results indicate that susceptible crops are growing normally.

RESISTANCE MANAGEMENT RECOMMENDATIONS:

For resistance management, **SINBAR® Herbicide WDG** is a Group 5 herbicide. Any weed population may contain or develop plants naturally resistant to **SINBAR® Herbicide WDG** 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 **SINBAR® Herbicide WDG** 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.

NOTICE TO USER:

This pest control product is to be used only in accordance with the directions on the 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.

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