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**CHIPCO® RONSTAR® 50 WP
Herbicide**

Selective Freemerdenace Herbicide for the Control of Annual Grasses and Broadleaf Weeds In Turf and Ornamentals

FOR SALE TO, USE AND STORAGE BY COMMERCIAL NURSERY, TURF AND LANDSCAPE PERSONNEL ONLY.
NOT FOR USE ON HOME LAWNS.

ACTIVE INGREDIENT:	
Metolachlor (2-tert-butyl-4-(2,4-dichloro-5-isopropoxyphenyl)-f ² -1, 3, 4-oxadiazolin-5-one).....	501
INERT INGREDIENTS.....	501

**KEEP OUT OF REACH OF CHILDREN
WARNING**

For PRODUCT USE Information Call 1-800-334-9745
For EMERGENCY Information ONLY Call 24 Hours A Day 1-800-334-7577

EPA Reg. No. 264-472

EPA Est.

DuPont Agricultural Company
12014 21. W. Alexander Drive
Research Triangle Park, North Carolina 27709

ACCEPTED
 SEP 16 1991
 by the Federal Insecticide
 Fungicide and Rodenticide
 Administration
 Office of Pesticide Programs
 Washington, D.C. 20548
 EPA Reg. No. 264-472

PRECAUTIONARY STATEMENTS

WARNING
HAZARDS TO HUMANS
Irritant if inhaled or absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing dust. Causes substantial but temporary eye injury. Wear protective clothing including long sleeved shirt, gloves and goggles or face shield when handling material. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Drink promptly a large quantity of milk, egg whites, gelatin solution or if these are not available, drink large quantities of water. Avoid alcohol. Get medical attention.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention if irritation persists.

IF IN EYES: Flush with plenty of water. Get medical attention if irritation persists.

ENVIRONMENTAL HAZARDS

Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of wastes.

STORAGE AND DISPOSAL

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

Do not store near other pesticides or seeds.

PESTICIDE DISPOSAL:

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL:

Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.

GENERAL INFORMATION

Chipco RONSTAR[®] 50 WF is a selective, preemergence herbicide for control of many annual grasses and broadleaf weeds on turf and a variety of woody ornamental shrubs and trees. Chipco RONSTAR[®] 50 WF controls weeds by killing the young weed seedlings as they come in contact with the herbicide during germination.

Do not apply through any kind of irrigation system.

Apply Chipco RONSTAR[®] 50 WF with a properly calibrated sprayer that will apply the spray solution uniformly (uniform application is essential for satisfactory weed control). Calibrate the sprayer prior to use, according to the manufacturer's directions and check daily to be certain that the equipment is working properly.

Do not allow domestic animals to graze treated areas. Avoid contamination of water intended for irrigation and domestic use.

CROP TOLERANCE: Chipco RONSTAR 50 WP can be used as directed spray to the soil surface on of container and field grown woody ornamental shrubs and trees. Chipco RONSTAR 50 WP may be used as an over the top spray in a minimum of 50 gallons per acre, at the recommended rates, on the following ornamental species only:

<u>SPECIES</u>	<u>VARIETIES</u>
Arborvitae	American - Soaragd, Rheingold Giant - Zebina
Barberry	Japanese
Boxwood	Bazzler
Cedar	Eastern Red
Cranberry	American
Deodarea	Purpurea
Eucalyptus	Evergreen - Golden Japanese, Gold Spot
False Cypress	Nootka - Aurea Hinoki - Graciosa, Pyramis Sawara - Aurea Nana
Holly	Japanese - Melleri Europane Chinese - Parsons
Juniper	Chinese-Metz, Pfitzer Sylvester Common - Berkshire, Effusa Creeping - Blue Chip, Blue Rug, Andorra Singleseed - Blue Star Savin - Buffalo, Tanariscifolia
Osander	Common
Osipogon	
Pine	Eastern white, Mugho, Scotch
Raphiolepis	

Local conditions may affect the activity of this chemical. Consult State Agricultural Experiment Station or Extension Service weed specialists for specific recommendations for local weed problems.

LANDSCAPE PLANTINGS: COMMERCIAL, ROADSIDE, & INDUSTRIAL SITES. Apply CHIPCO RONSTAR 50 WP prior to weed seed germination as an over the top spray only on labelled ornamentals.

DIRT TO USE: Apply CHIPCO RONSTAR 50 WP broadcast, in a minimum of 50 gallons of water per acre, to established ornamentals. 4 pounds of product per acre. Remove existing weed growth before application. Do not apply within 60 days of transplanting. Do not apply with adjuvants or drift control agents. Sprinkle irrigate within 2 hours after application, otherwise crop injury may result.

CROP TOLERANCE: CHIPCO RONSTAR 50 WP may be used as an over the top spray on the following ornamental species only:

<u>SPECIES</u>	<u>VARIETIES</u>
Ice Plant	Large Leaf
Ivy	English, Algerian
Basil	African Trailing
Periwinkle	Major, Minor

TANK-MIX COMBINATIONS: Ornamental Plantings and Noncrop land areas: Tank-mix combinations of CHIPCO RONSTAR/Roundup are recommended to control existing undesirable vegetation. Applied as a directed spray, CHIPCO RONSTAR plus Roundup will provide pre and postemergence control of susceptible species listed on the respective labels of the two herbicides.

MIXING INSTRUCTIONS: CHIPCO RONSTAR 50 WF should be added to the tank and diluted prior to introduction of Roundup. Please refer to Roundup label for information on surfactant use. Only mix the amount of spray needed for immediate application needs as settling can occur if spray mixture is allowed to sit over an extended period of time.

PRECAUTION: Roundup is not recommended as an over the top spray in ornamentals. Extreme care must be exercised to avoid contact of spray containing Roundup with foliage, stems, green bark, or bare roots of desirable turfgrasses, trees, shrubs, or other desirable vegetation since severe damage or destruction may result. If spraying areas adjacent to desirable plants with Roundup, use a shield made of cardboard, sheet metal, or plywood while spraying to help prevent spray from contacting foliage of desirable plants.

BROADCAST APPLICATION RATES:

CHIPCO RONSTAR/ROUNDUP

	CHIPCO RONSTAR 50 WF		ROUNDUP	
	Ounces Per 100v Sq. Ft.	Pounds Per Acre	Ounces Per 100v Sq. Ft.	Quarts Per Acre
Existing Annual and Broadleaf Weeds				
Less Than 6" Tall	1.5-3	4-8	3/4	1
Greater Than 6" Tall	1.5-3	4-8	1 1/8	1 1/2
Existing Perennial	1.5-3	4-8	1 1/2-3	2-5

These rates are intended as general information. Consult rate sections in individual product labels for detailed information on specific weed species controlled and rates of application.

LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants that this product conforms to the chemical description on the label; that this product is reasonably fit for the purposes set forth in the directions for use when it is used in accordance with such directions; and that the directions, warnings and other statements on this label are based upon reasonable experts' evaluation of reasonable tests of effectiveness, or toxicity to laboratory animals and to plants, and of residues, and upon reports of field experience. Tests have not been made on all varieties or in all states or under all conditions. THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE, ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS, WARNINGS OR CAUTIONS.

BUYER'S EXCLUSIVE REMEDY AND MANUFACTURER'S OR SELLER'S EXCLUSIVE LIABILITY FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF, OR THE REPAYMENT OF THE PURCHASE PRICE FOR, THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

CHIPCO AND RONSTAR are registered trademarks of Rhone-Poulenc.

Roundup is a registered trademark of Monsanto Company.

TURF

Use in dormant, established Bermuda grass, St. Augustine grass and Zoysia turf such as fairways, parks, golf courses and lawns. Chipco RONSTAR 50 WP controls Crabgrass (*Digitaria* spp.) and Goosegrass (*Elymus indicus*).

Chipco RONSTAR 50 WP should be applied at least 2-3 weeks prior to green up. Make turf area free of leaves, mowing if necessary so the spray solution reaches the soil surface. Measure the area to be treated and uniformly apply the amount required. If rain is not expected shortly after application, sprinkle the turf thoroughly.

Amount to Use

Crabgrass and Goosegrass Control: For preemergence control, apply 4-6 pounds of RONSTAR 50 WP per acre in 30-150 gallons of water or 1.5-2.2 ounces of RONSTAR 50 WP per 1000 sq. ft. in 0.75-3.5 gallons of water. Application should be made to dormant turf in early spring prior to weed seed germination.

Do not apply RONSTAR 50 WP to newly seeded areas. Seeding into treated areas should be delayed until 4 months after treatment. RONSTAR 50 WP should not be used on putting greens or tees because of the varying cultural practices used.

ORNAMENTALS

WOODY ORNAMENTAL SHRUBS AND TREES APPLICATION: Apply Chipco RONSTAR 50 WP prior to weed seed germination, as an over the top spray only on the plant species listed below, or as a directed spray to the soil surface. Chipco RONSTAR 50 WP can be applied to both actively growing or dormant ornamentals. However, Chipco RONSTAR 50 WP should not be applied during bud break or during the 4 weeks after bud break.

Rainfall or overhead irrigation (one-half inch/acre) immediately after application of Chipco RONSTAR 50 WP will improve weed control activity. Rainfall or overhead irrigation immediately after over the top sprays is required to move the Chipco RONSTAR 50 WP from the foliage to the soil surface.

Chipco RONSTAR 50 WP should not be mixed into the soil. Cultivating or disturbing the soil may reduce the weed control activity of Chipco RONSTAR 50 WP.

AMOUNT TO USE: Ground Application - Apply Chipco RONSTAR 50 WP broadcast to ornamentals at 4 to 8 pounds of product per acre in a minimum of 50 gallons of water per acre, depending on the weeds to be controlled, as listed below. Remove existing weed growth before application.

Chipco RONSTAR 50 WP at 4 to 8 pounds per acre is effective in controlling annual grasses and broadleaf weeds such as:

ANNUAL BROADLEAF WEEDS

Bittercress	(<i>Cardamine</i> spp.)
Carpetweed	(<i>Mollugo verticillata</i>)
Common Groundsel	(<i>Senecio vulgaris</i>)
Common Furslane	(<i>Portulaca oleraceae</i>)
Eveningprimrose	(<i>Oenothera</i> spp.)
Florida Fustic	(<i>Richardia scabra</i>)
Galinsoga	(<i>Galinsoga</i> spp.)
Golden Ragwort	(<i>Senecio aureus</i>)
Groundsellers	(<i>Chenopodium album</i>)
Liverwort	(<i>Marchantia</i> spp.)
Oxalis	(<i>Oxalis</i> spp.)
Pennsylvania Smartweed	(<i>Polygonum pennsylvanicum</i>)
Petty Spurge	(<i>Euphorbia peplus</i>)
Prostrate Spurge	(<i>Euphorbia supina</i>)
Red Top	(<i>Amaranthus</i>)
Red Top	(<i>Veronica</i> spp.)
Red Top	(<i>Hypochaeris radicata</i>)
Red Top	(<i>Coronopus didymus</i>)
Yellow Woodsorrel	(<i>Oxalis stricta</i>)

ANNUAL GRASSES

Annual Bluegrass	(<i>Poa annua</i>)
Barnyardgrass	(<i>Echinochloa crus-galli</i>)
Cypergrass	(<i>Axonopus distans</i>)
Crabgrass	(<i>Digitaria</i> spp.)
Fall Panicum	(<i>Panicum dichotomiflorum</i>)
Goosegrass	(<i>Elymus indicus</i>)
Green foxtail	(<i>Setaria viridis</i>)

Use 4 to 8 pounds of product per acre.
Use 6 pounds product per acre.