



Howard Johnson's Trifluralin 5G

A selective preemergence herbicide for control of certain annual grasses and broadleaf weeds in:

Container Grown Ornamentals, Landscape Ornamentals, Nursery Stock, Ground Covers, Established Flowers, Ornamental Bulbs, Non-bearing Fruit and Nut Trees and, Non-bearing Vineyards, Christmas Tree Plantations, Non-cropland, and Under Paved Surfaces

Active Ingredient:

Trifluralin: a,a, a-trifluoro-2,6-dinitro-N,N-

dipropyl-p-toluidine 5.0%

Inert Ingredients: 95.0%

Total 100.0%

Contains 2 pounds active ingredient per 40 pound bag.

EPA Reg. No. 53883-240-32802

EPA Est. No. 59144-GA-1(A), 32802-MO-1(B), 37351-CO-1 (C)

Net Weight 40 lbs (18.14 kg)

Manufactured for: Howard Johnson's Enterprises, Inc 9675 S 60th Street, Franklin, WI 53132

Keep Out of Reach of Children

CAUTION PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Precautionary Statements

Hazards to Humans and Domestic Animals

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wear long-sleeved shirt and long pants, socks and shoes. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

First Aid	
If in eyes:	Flush eyes with plenty of water. 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 physician if irritation persists.
If swallowed:	Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.
If on skin or clothing	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call poison control center or doctor for treatment advice.
If inhaled:	Move person to fresh air. If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall (866)-897-8050. for emergency medical treatment information.	

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves, such as butyl rubber > 11 mils; or natural rubber > 14 mils; or neoprene rubber > 14 mils; or nitrile rubber > 14 mils.
- Shoes plus socks

Follow instructions for cleaning maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Controls

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets with requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240 (d) (4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards

This pesticide is extremely toxic to freshwater marine, and estuarine fish and aquatic invertebrates including shrimp and oyster. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply in a manner that will directly expose canals, lakes, streams, ponds, marshes or estuaries to aerial drift. Do not contaminate water when disposing of equipment washwaters.

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (RE) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls over long-sleeved shirt and long pants, socks and chemical resistant footwear and waterproof gloves.

Non-Agricultural Use Requirements

The requirements of this-box apply to uses of this product that are NOT within the scope of the Worker . Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter or allow others to enter the treated area until dusts have settled. If soil incorporation is required after the application, do not enter or allow others to enter the treated area (except those persons involved in the incorporation) until the incorporation is complete. If the incorporation is accomplished by watering-in, do not enter or allow others to enter the treated area until the surface is dry after the watering-in.

General Information

Trifluralin 5G herbicide is a preemergence herbicide for control of certain annual grasses and broadleaf weeds in container grown ornamentals, landscape ornamentals, nursery stock, ground covers, established flowers, ornamental bulbs, non-bearing fruit and nut trees and non-bearing vineyards, Christmas tree plantations, noncropland, and under paved surfaces. Apply Trifluralin 5G before or after planting but prior to germination of target weeds, or immediately after cultivation. Length of weed control will vary with weed population, potting media or soil conditions, temperature, watering regime, and other factors. Following application, user should monitor and observe level of weed control over time to determine when additional applications may be needed. Repeat applications should not be made sooner than 60 days after a previous application of Trifluralin 5G. Do not apply over 240 pounds per acre total of Trifluralin 5G within a 12-month period.

Use Precautions

Trifluralin 5G does not control established weeds. Existing weeds should be controlled by cultivation or with herbicides. Weed residues, prunings and trash should be removed or thoroughly mixed into soil prior to treatment. Soil should be in good condition and free of clods at the time of application. A single rainfall or sprinkler irrigation of 0.5 inches or more, or flood irrigation, is required to activate Trifluralin 5G. Optimum weed control is obtained when Trifluralin 5G is activated within 3 days of application. If rainfall or irrigation has not occurred within 3 days of application and tillage is possible, Trifluralin 5G may be activated using cultivation equipment capable of uniformly mixing the herbicide into the upper 1-2 inches of soil. Failure to activate Trifluralin 5G within 3 days of application may result in erratic weed control. Do not apply when wind conditions favor drift of Trifluralin 5G granules from the target area. Optimum weed control will be obtained when followed by overhead irrigation or rainfall within a few hours after surface application.

Do not aerially apply this product.

Weeds Controlled

The following list of weeds and grasses will be controlled when Trifluralin 5G is applied at 80 lb/acre (1.8 lb/1000 sq ft).

Annual Grasses

Common Name
barley, hare
barnyardgrass (water
grass)

bluegrass, annual
brome
cheat
crabgrass
cugrass,
southwestern

fescue, rattleail
foxtail
goosegrass
junglerice
lovegrass
oat, wild
panicum, fall
sandbur, field
signalgrass

Scientific Name

Hordeum leporinum
Echinochloa crus-galli

Poa annua
Bromus spp.
Bromus secalinus
Digitaria spp.

Echinochloa gracilis
Vulpia myuros
Setaria spp.
Eleusine indica
Echinochloa colonum
Eragrostis spp.
Avena fatua
Panicum dichotomiflorum
Cenchrus incertus
Brachiaria spp.

Annual Broadleaf Weeds

Common Name
chickweed, common
goosefoot, nettleleaf
knotweed, prostrate

kochia
lambquarters, common
nettle, stinging
pigweed
purslane, common
thistle, Russian

Scientific Name

Stellaria media
Chenopodium murale
Polygonum aviculare
Kochia scoparia
Chenopodium album
Urtica dioica
Amaranthus spp.
Portulaca oleracea
Salsola iberica

The following weeds will be partially controlled or suppressed at 80 lb/acre (1.8 lb/1000 sq ft).

Scientific Name

Mollugo verticillata
Sorghum halepense
Panicum texanum

Common Name

carpetweed
johnsongrass (from seed)
panicum, Texas

Scientific Name

Richardia scabra
Sorghum bicolor

Common Name

pusley, Florida
shattercane

Application Instructions

Apply Trifluralin 5G using a drop or rotary-type spreader designed to apply granular herbicides or insecticides. Calibrate application equipment prior to use according to manufacturer's directions. Check frequently to be sure equipment is working properly and distributing granules uniformly. Do not use spreaders that apply material in narrow concentrated bands. Avoid skips or overlaps as poor weed control or plant injury may occur. More uniform application may be achieved by spreading half of the required amount of product over the area and then applying the remaining half in swaths at right angles to the first.

Application Techniques

1. When using a drop-type spreader, a splash board mounted under the hopper will provide more even granule distribution.
2. A chain fastened to the side of the spreader and allowed to drag on the soil surface can be used to mark the edge of the treated swath and help prevent skips or overlaps.
3. For treating smaller areas or rows of nursery stock or ornamental beds, a hand held or push-type rotary applicator such as whirlbird or cyclone unit is recommended. For hand held units, walk and turn the crank at a constant rate of speed.
4. A shaker-type applicator made from a small container with holes punched in the bottom is recommended for small, hard to treat areas. Carefully measure the amount of product needed to avoid overapplication.

Use Sites

Trifluralin 5G is recommended as a preemergence treatment for control of certain annual grasses and broadleaf weeds in container grown ornamentals, landscape ornamentals, nursery stock, ground covers, established flowers, ornamental bulbs, non-bearing fruit and nut trees and non-bearing vineyards and Christmas tree plantations. Apply Trifluralin 5G before or after planting but prior to germination of target weeds, or immediately after cultivation. Refer to the "General Information" section of this label for general use precautions and information on application, application rates and weeds controlled.

Use Precautions

To avoid possible injury, do not apply Trifluralin 5G to:

- nursery forest or Christmas tree seedling beds, cutting beds, or transplant beds
- unrooted liners or cuttings that have been planted in pots for the first time
- pots less than four inches wide

• ground covers until they are established and well rooted

Do not apply Trifluralin 5G to newly transplanted ornamentals, nursery stock, ground covers, flowers and non-bearing fruit and nut crops and non-bearing vineyards until soil or potting media has been settled by packing and irrigation or rainfall and no cracks are present or injury may occur.

Do not make preplant applications of Trifluralin 5G to areas where gladioli corms less than one inch in diameter will be planted or injury may occur.

Do not apply Trifluralin 5G in greenhouse or other enclosed structures.

Repeat applications should not be made sooner than 60 days after a previous application of Trifluralin 5G. Do not apply over 240 pounds per acre total of Trifluralin 5G within a 12-month period.

Users who wish to use Trifluralin 5G on plant species not recommended on this label may determine suitability for such uses by making trial application of Trifluralin 5G at a recommended rate to small number of plants. Prior to using Trifluralin 5G on a larger number of plants, the treated plants should be observed for signs of herbicidal injury during 30 to 60 days of normal growing conditions to determine if the treatment is non-injurious to the target plant species.

The user assumes responsibility for any plant damage or other liability resulting from the use of Trifluralin 5G on plant species not recommended on this label.

Trifluralin 5G May Be Used On The Following Established Plant Species When Container Grown or Field Grown: TREES

Scientific Name	Common Name	Scientific Name	Common Name
<i>Abies balsamea</i>	Balsam fir	<i>Liquidambar styraciflua</i>	American sweet gum
<i>Abies concolor</i>	White fir	<i>Linodendron tulipifera</i>	Tuliptree
<i>Abutilon hybridum</i>	Albus-flowering maple	<i>Magnolia</i> spp.	Magnolia
	Luteus-flowering maple	<i>Malus</i> spp.	Crabapple
	Roseus-flowering maple	<i>Morus alba</i>	White mulberry
	Tangerine-flowering maple	<i>Musa aluminata</i>	Banana
	Vesuvius red-flowering maple	<i>Nyssa sylvatica</i>	Blackgum
	Flame maple	<i>Oxydendrum arboreum</i>	Sourwood
<i>Acer ginnala</i>	Norway maple	<i>Picea abies</i>	Norway spruce
<i>Acer platanoides</i>	Red maple		Pendula-weeping Norway spruce
<i>Acer rubrum</i>	Red sunset maple		Repens-spreading Norway spruce
	Silver maple	<i>Picea glauca conica</i>	Dwarf Alberta spruce
<i>Acer saccharinum</i>	Sugar maple	<i>Picea glauca</i>	White spruce
<i>Acer saccharum</i>	Queen palm	<i>Picea pungens</i>	Dwarf globe blue spruce
<i>Arecastrum romanzoffianum</i>			Glaucia-Colorado blue spruce
<i>Betula nigra</i>	River birch		Haopsii-Hoop's blue spruce
<i>Betula papyrifera</i>	Paper birch		Koster-Koster blue spruce
<i>Betula pendula</i>	European white birch		Bristlecone pine
<i>Brachychiton populneus</i>	Bottle tree		Canary Island pine
<i>Bucida buceras</i>			Shore pine, beach pine
<i>Castanea mollissima</i>	Black olive		Eldarica pine
<i>Ceratonia siliqua</i>	Chinese chestnut		Bosnian pine
<i>Cercis canadensis</i>	Carob		Pumilio-shrubby Swiss mountain pine
<i>Chamaecyparis obtuse</i>	Redbud		Austrian black pine
	Filicoides-femspray cypress		Monterey pine
	Gracilis-slender Hinoki cypress		Red pine
	Swara false cypress		Labially pine
<i>Chamaecyparis pisifera</i>	Squarrosa-moss cypress		White pine
	Palm		Columnar Scotch pine
<i>Chamaedorea cataractarum</i>			Scotch pine
<i>Chamaedorea costaricana</i>			Japanese black pine
<i>Chamaedorea elegans</i>	Parlor palm		London planetree
<i>Cornus florida</i>	Cloud nine dogwood		American sycamore
	Flowering dogwood		Californian sycamore
	Dogwood, kousa		Podocarpus
<i>Cornus kousa</i>	Green hawthorn		Cottonwood
<i>Crataegus viridis</i>	Carrot wood		Chilean mesquite
<i>Cupaniopsis anacardioides</i>			Yoshino flowering cherry
<i>Cupressus glabra</i>	Arizona cypress		Douglasfir
<i>Eleagnus angustifolia</i>	Russian olive		Scarlet oak
<i>Eucalyptus camaldulensis</i>	Redgum eucalyptus		Bear oak
<i>Eucalyptus cinerea</i>	Mealy eucalyptus		Pin oak
	Silver dollar eucalyptus		Willow oak
<i>Eucalyptus microtheca</i>	Coolibah tree		Red oak
<i>Eucalyptus sideroxyion</i>	Red ironbark eucalyptus		Live oak
<i>Ficus benjamina</i>	Ficus		Black locust
	Mini ficus		Willow
	White ash		Giant sequoia
<i>Fraxinus americana</i>	Shamel ash		Mahogany
<i>Fraxinus udhei</i>	Ginko-maidenhair tree		Yellow tab
<i>Ginko biloba</i>	Honey locust		Baldcypress
<i>Gleditsia triacanthos</i>	Shademaster honey locust		Linden
	Toyon		Eastern hemlock
<i>Heteromeles arbutiflora</i>	Florida anise-tree		Chinese elm
<i>Illicium floridanum</i>	Eastern red cedar		Mexican fan palm
<i>Juniperus virginiana</i>	Japanese larch		
<i>Larix kaempferi</i>			

