

OCT 26 1987

Anvac Chemical Corporation
c/o H.R. McLane, Inc.
7210 SW. 57th Avenue, Suite 212A
Miami, FL 33143

Gentlemen:

Subject: 90-Day Response - Trifluralin Registration Standard
Alco Trifluralin EC
EPA Registration No. 5481-172
Your Submission Dated October 5, 1987

Your 90-Day Response to the Trifluralin Registration Standard is
acceptable and has been included in our files.

Sincerely yours,

Richard F. Mountfort *RFM*
Product Manager (23)
Fungicide-Herbicide Branch
Registration Division (TS-767C)

15675:I:Mountfort:MF-3:KENCO:10/22/87:11/3/87:aw:vc:bm

CONCURRENCES

SYMBOL								
SURNAME								
DATE								



PD 7



TRIFLURALIN

EMULSIFIABLE CONCENTRATE

A HERBICIDE FOR PROFESSIONAL USE
IN ORNAMENTALS

A SELECTIVE, PRE-EMERGENCE HERBICIDE
FOR THE CONTROL OF ANNUAL GRASSES
AND BROADLEAF WEEDS IN:

- NURSERY STOCK
- ORNAMENTAL TREES
- ORNAMENTAL WOODY SHRUBS
- GLADIOLI
- ESTABLISHED FLOWERS
(See Attached List for Species)

ACTIVE INGREDIENT:

*trifluralin (a,a,a-trifluoro-2,
6-dinitro-N, N-dipropyl-p-toluidine) ... 44.5%

INERT INGREDIENTS	55.5%
	<hr/>
	100.0%

Contains 4 pounds active ingredient per gallon

KEEP OUT OF REACH OF CHILDREN

C A U T I O N

STATEMENTS OF PRACTICAL TREATMENT

~~IF SWALLOWED: Call a physician or Poison Control Center immediately. Induce vomiting by giving victim 1 or 2 glasses of water and touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious or convulsing person. This product contains a petroleum solvent. Vomiting may cause aspiration pneumonia.~~

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

IF ON SKIN: Remove contaminated clothing and wash affected area with soap and water. Get medical attention if irritation persists.

IF INHALED: Remove victim to fresh air and apply artificial respiration if indicated. Get medical attention.

SEE SIDE/BACK PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

EPA REG. NO. 5481-172-AA

EPA EST. NO. 5481-CA-1

NET CONTENTS 1 GALLON

AMVAC CHEMICAL CORPORATION

ACCEPTED
with comment
JUL 19 1985
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, this product is registered under EPA Reg. No. 5481-172-AA

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PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling and before eating or smoking. Do not contaminate foodstuffs or feeds.

ENVIRONMENTAL HAZARDS

Do not contaminate water by cleaning of equipment or disposal of wastes. This product is toxic to fish. Keep out of any body of water. Use only as directed on this label.

PHYSICAL AND CHEMICAL HAZARDS

Do not use, pour, spill or store near heat or open flame. DO NOT ALLOW TO FREEZE STORE ABOVE 40°F

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. STORAGE: Store product in its original container in a cool, dry, locked place out of reach of children. 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: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

WEED CONTROLLED

Annual Grasses	-----	Annual Broadleaf Weeds
Craygrass	Stinkgrass	Pigweeds (hoary radroot)
Barnyardgrass (watergrass)	Bromegrass	Carrots-weed
Foxtails	Bracharia	Lambquarters
(including giant foxtail)	Sandbar	Carpetweed
Johnsongrass (from seed)	Jungle rice	Russian thistle
Goosegrass	Annual bluegrass	Kochia
Wild Cane (shattercane)	Sprangletop	Purslane
Texas panicum	Chenopium	Florida purslane
		Knottedweed
		Stinging Nettle
		Goosefoot
		Chickweed

Note: TRIFLURALIN will not control certain resistant weeds such as Cocklebur, Velvetleaf, Jimson-weed, Ragweed, Venice Mallow and Nutgrass

GENERAL DIRECTIONS

TRIFLURALIN is a pre-emergence herbicide which is incorporated into the soil to provide long lasting control of annual grasses and broadleaf weeds (see above list). TRIFLURALIN controls weeds by killing their seeds as they germinate. It does not control established weeds.

Incorporation of TRIFLURALIN helps assure effective weed control regardless of weather conditions and permits shallow cultivation, rotary hoeing and hand hoeing without reducing its weed control activity.

TRIFLURALIN is recommended for use on a wide variety of ornamental trees, shrubs, and flowers. The ornamental species on which TRIFLURALIN can be used at the recommended rates without damage include those listed on the side panels.

APPLICATION DIRECTIONS

TRIFLURALIN emulsifiable concentrate is to be mixed with water and applied as a spray immediately before, or in the same operation as soil incorporation. Apply 10 to 40 gallons of water per acre, broadcast based using any properly calibrated low-pressure boom-type herbicide sprayer that will uniformly apply the spray. Pour the recommended amount of TRIFLURALIN for your soil type into the spray tank during the filling operation and mix thoroughly before spraying. Do not overapply.

INCORPORATION DIRECTIONS

TRIFLURALIN must be incorporated into the soil immediately after application to prevent loss of its activity. Spraying and incorporation should be done in the same operation, if possible. The machinery used should break up large clods and mix TRIFLURALIN thoroughly with the soil. The more thoroughly the TRIFLURALIN is mixed with the soil, the more consistent the weed control will be.

Incorporation before planting (pre-plant). Thorough incorporation may be achieved with the following PTO driven equipment (tillers, cultivators, hoes) set to cut 2 to 3 inches deep, double disc for double disc with spike-tooth harrow in tandem set to cut 3 to 6 inches deep and operated in two different directions (cross disc) at 4 to 8 mph, rolling cultivators set to cut 2 to 4 inches deep and operated at 6 to 8 mph or a bed conditioner (Do-All) set to cut 2 to 4 inches deep and operated at 4 to 6 mph.

Incorporation after planting (post-plant). Incorporation may be achieved around established plants by using PTO driven equipment (tillers, cultivators, hoes) set to cut 2 to 3 inches deep, or rolling cultivators set to cut 2 to 4 inches deep and operated at 6 to 8 mph. When incorporating TRIFLURALIN in transplants, new liners or established plants, the implement should be adjusted so that treated soil is thrown toward and around the plants in the row.

Clean cultivate area to be treated before application since TRIFLURALIN will not control established weeds.

Shallow incorporation with implements set to cut less than 2 inches deep may result in erratic weed control. Do not use spike- or spring-tooth harrows alone for incorporation.

APPLICATION RATES

Apply and incorporate TRIFLURALIN prior to the planting of new nursery stock, liners, ornamentals, trees and woody shrubs, and gladiolus (Gladiolus) corms less than 1 inch in diameter may be injured by pre-plant applications of TRIFLURALIN. TRIFLURALIN may also be applied to established plantings by using a directed spray to the soil between rows and beneath the plants.

Broadcast (overall) Application Rates

Light Soils	Medium Soils	Heavy Soils
1 pint/acre (1/2 pound active)	1 1/2 pints/acre (1 1/4 pound active)	2 pints/acre (1 1/2 pound active)

For band applications use the following formula to figure the amount to apply:

band width in inches / row width in inches = recommended broadcast rate / amount to apply per acre on band

TRIFLURALIN is not recommended on muck soils

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NOTICE: This product conforms to its chemical description and is reasonably fit for the purpose stated on the label when used in accordance with directions under normal conditions of use. Manufacturer is not responsible for the use of this product contrary to the label instructions or under abnormal conditions or under conditions not reasonably foreseeable to the manufacturer and/or seller and buyer assumes the risk of any such use.

SUPPLEMENTAL LABELING BOOKLET - LIST OF APPLICATION SITES

ORNAMENTAL WOODY SHRUBS

Scientific Name	Common Name
<i>Salix</i>	Willow
<i>Spiraea vanhouttei</i>	Spiraea
<i>Spiraea vulgaris</i>	Common L. Lic
<i>Taxus cuspidata</i>	Japanese Yew
<i>Taxus media</i>	Yew
<i>Viburnum acerifolium</i>	American Arbutus
<i>Viburnum odoratissimum</i>	Sweet Viburnum
<i>Viburnum suspensum</i>	Sandwich Viburnum
<i>Viburnum tomentosum</i>	Doublefile Viburnum
<i>Viburnum wrightii</i>	Viburnum
<i>Weigela</i>	Weigela, Bristol Ruby

ESTABLISHED FLOWERS

Scientific Name	Common Name
<i>Achillea</i>	Marijuana
<i>Ageratum</i>	Blazing Glory
<i>Arctostaphylos</i>	Redwood
<i>Aster</i>	Heavenly Blue
<i>Balsamorhiza</i>	Parsonage
<i>Calendula</i>	Poppy
<i>Calliopsis</i>	Poppy
<i>Canna</i>	Flower
<i>Canna</i>	Flower
<i>Chrysanthemum</i>	Chrysanthemum
<i>Cosmos</i>	Cosmos
<i>Dahlia</i>	Dahlia
<i>Dianthus</i>	Dianthus
<i>Dianthus</i>	Dianthus
<i>Forget-me-not</i>	Forget-me-not
<i>Fuchsia</i>	Fuchsia
<i>Geranium</i>	Geranium
<i>Gladiolus</i>	Gladiolus
<i>Isatis</i>	Isatis
<i>Lupinus</i>	Lupinus

AMVAC CHEMICAL CORP.
 LOS ANGELES, CALIF. 90023

EPA Reg. No. 5481-172-AA
 EPA Est. 5481-CA-1



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ACTIVE INGREDIENT:	% By Weight
Trifluralin (o,o,a-trifluoro-2,6-dinitro-N, N-dipropyl-p-toluidine)	44.5%
INERT INGREDIENTS	55.5%
	100.0%

Contains 4 pounds active ingredient per gallon

Refer to Complete Label affixed to product container for Directions For Use

ORNAMENTAL TREES

Scientific Name	Common Name
<i>Abies balsamea</i>	Balsam Fir
<i>Acacia salicina</i>	Norway Spruce
<i>Acer rubrum</i>	Red Maple
<i>Acer saccharinum</i>	Sugar Maple
<i>Acer saccharum</i>	Sugar Maple
<i>Betula pendula</i> var. <i>lacinate</i>	European White Birch
<i>Catalpa bignonioides</i>	Chinese Chestnut
<i>Carya canadensis</i>	Flowering Dogwood
<i>Carya floridana</i>	Flowering Dogwood
<i>Carya leucocarpa</i>	White Ash
<i>Fraxinus americana</i>	Honey Locust
<i>Gleditsia triacanthos</i>	Black Walnut
<i>Larix laricina</i>	Japanese Larch
<i>Liquidambar styraciflua</i>	Sweetgum
<i>Liriodendron tulipifera</i>	Tulip Tree
<i>Morus nigra</i>	Apple
<i>Myrica asplenifolia</i>	Black Gum
<i>Pinus strobus</i>	Norway Spruce
<i>Pinus glauca</i>	White Spruce
<i>Pinus rigida</i>	Colorado Blue Spruce
<i>Pinus resinosa</i>	Australian Pine
<i>Pinus strobus</i>	Red Pine
<i>Pinus strobus</i>	White Pine
<i>Pinus strobus</i>	Scotch Pine
<i>Pinus strobus</i>	Laburnum Pine
<i>Pinus strobus</i>	Japanese Black Pine
<i>Pinus strobus</i>	London Plane Tree
<i>Pinus strobus</i>	Sycamore
<i>Pinus strobus</i>	Cottonwood
<i>Pinus strobus</i>	Stane-Fruit
<i>Pinus strobus</i>	Douglas Fir
<i>Pinus strobus</i>	Scarlet Oak
<i>Pinus strobus</i>	Pin Oak
<i>Pinus strobus</i>	Red Oak
<i>Pinus strobus</i>	Black Locust
<i>Pinus strobus</i>	Bald Cypress
<i>Pinus strobus</i>	Canada Hemlock

ORNAMENTAL WOODY SHRUBS

Scientific Name	Common Name
<i>Berberis montana</i>	Berberis
<i>Berberis thunbergii</i>	Japanese Berberis
<i>Buxus harlandii</i>	Harland Boxwood
<i>Buxus microphylla</i>	Boxwood
<i>Buxus sempervirens</i>	Common Boxwood
<i>Camellia japonica</i>	Camellia
<i>Camellia japonica</i>	Sasanqua Camellia
<i>Cayota japonica</i>	Sakaki
<i>Cotoneaster spicatus</i>	Cotoneaster
<i>Cotoneaster zabelii</i>	Cotoneaster
<i>Deutzia</i>	Deutzia
<i>Elaeagnus pungens</i>	Elaeagnus
<i>Eucalyptus alatus</i>	Eucalyptus
<i>Eucalyptus fortunei</i>	Eucalyptus
<i>Eucalyptus neesii</i>	Eucalyptus
<i>Ficus virens</i>	Parrotia Gum
<i>Forsythia</i>	Forsythia (Golden Bell)
<i>Hamamelis</i>	Japanese Holly
<i>Hamamelis</i>	Holly
<i>Juniperus chinensis</i>	Juniper
<i>Juniperus conferta</i>	Shore Juniper
<i>Juniperus horizontalis</i>	Red Cedar
<i>Kalmia latifolia</i>	Mountain Laurel
<i>Ligustrum aratum</i>	Privet
<i>Ligustrum japonicum</i>	Privet
<i>Ligustrum ovalifolium</i>	Privet
<i>Lonicera</i>	California Privet
<i>Philadelphus lamarckii</i>	Honey-suckle
<i>Parrotia japonica</i>	Mock Orange
<i>Pittosporum tobira</i>	Forsythia
<i>Podocarpus neriifolia</i>	Redwood
<i>Podocarpus neriifolia</i>	Yew Pine
<i>Pyracantha</i>	Firethorn
<i>Raphanistrum indicum</i>	Indian Hawthorn
<i>Rhododendron arboreum</i>	Azalea
<i>Rhododendron arboreum</i>	Rhododendron

(continued next page)

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