

PM 23 34704-226

10/5

Glenda Haage
 Platte Chemical Company
 P.O. Box 667
 Greeley, CO 80632

SEP 25 1996

Dear Ms. Haage:

Subject: Revised Label To Comply With Worker Protection Standards
 Clean Crop Trifluralin EC
 EPA Registration No. 34704-226
 Your Submission Dated March 25, 1996

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable with the following provisions:

- 1) Revise the inhalation statement in the Statement of Practical Treatment to read "IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention."
- 2) We note an abbreviated version of the Statement of Practical Treatment listed under the heading "First Aid" and located directly beneath the Precautionary Statements. This abbreviated version should be deleted and replaced with a referral statement to refer users to the additional precautionary information elsewhere on the labeling.
- 3) Add the statements "Harmful if inhaled. Avoid breathing spray mist" to the Precautionary Statements.
- 4) Please comply with the type requirements for the precautionary statement "Keep out of reach of children" as set forth in 40 CFR §156.10(h)(1)(iv).

A stamped copy is enclosed for your records. Please submit one (1) final printed copy for the referenced label, incorporating the above changes, before releasing the product for shipment.

Sincerely yours,

Joanne I. Miller
 Product Manager (23)
 Fungicide-Herbicide Branch
 Registration Division (7505C)

Enclosure

DK: 305-7546: FHB/PM 23

		CONCURRENCES						
SYMBOL ▶	7505C							
SURNAME ▶	D. KENNY							
DATE ▶	9/20/96							

2075

PROPOSED LABEL



TRIFLURALIN

ACCEPTED with COMMENT
In EPA Letter Decision
SEP 25 1990

EC

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 34704-226

A selective herbicide for the pre-emergence control of annual grasses and broadleaf weeds in ornamentals, flowers and other areas as listed.

ENVIRONMENTAL HAZARDS
This pesticide is toxic to fish. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift or runoff from treatment areas may be hazardous to aquatic organisms in neighboring aquatic sites. Do not contaminate water by cleaning of equipment or disposal of wastes.

ACTIVE INGREDIENT:

Trifluralin (a,a,a-trifluoro-2,6-dinitro-N, N-dipropyl-p-toluidine)	44.5%
INERT INGREDIENTS	55.5%
TOTAL	100.0%

Contains 4 pounds active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN CAUTION

SEE BELOW FOR ADDITIONAL PRECAUTIONARY STATEMENTS AND DIRECTIONS FOR USE

EPA REG. NO. 34704-226

EPA EST. NO. _____

NET WEIGHT _____ POUNDS

5378

WPSEX03P96

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Keep out of reach of children. Do not get in eyes. Avoid contact with skin and clothing. Harmful if swallowed or absorbed through the skin.

First Aid: In case of contact immediately flush eyes or skin with plenty of water. For eyes, call a physician.

Personal Protective Equipment:
Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category G on the EPA chemical resistance category selection chart.

Applicators and other handlers must wear:
Long-sleeved shirt and long pants, chemical-resistant gloves, such as barrier laminate or viton, shoes plus socks.

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

Engineering controls statements:
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 (c) (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.

STATEMENT OF PRACTICAL TREATMENT

- If in eyes: Flush with plenty of water for 15 minutes and get medical attention.
- If on skin: Wash contaminated skin with soap and water. Remove contaminated clothing and launder before reuse. Get medical attention.
- If inhaled: Move to clear atmosphere. Restore breathing if necessary. Get medical attention.
- If swallowed: Do not induce vomiting and get medical attention immediately. Ingestion is toxic and irritating to the stomach. Vomiting may cause aspiration into the lungs resulting in pulmonary edema which may be fatal. Gastric lavage may be indicated.

PHYSICAL AND CHEMICAL HAZARDS

Do not use or store near heat and open flame.

SPECIAL PRECAUTIONS

Applied according to directions and under normal growing conditions, TRIFLURALIN EC will not harm the treated crop. Over application may result in crop injury or a soil residue.

Uneven application or improper soil incorporation can result in erratic weed control or crop injury. Plant disease, cold weather, deep planting, excessive moisture, high salt concentration or drought may weaken crop plants and increase the possibility of damage.

DIRECTIONS FOR USE

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

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 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 (REI) of 12 hours.

Exception: If the product is soil directed or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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, Chemical-resistant gloves, such as barrier laminate or viton, shoes plus socks.

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TRIFLURALIN EC
EPA REG. NO. 34704-226

STORAGE AND DISPOSAL

PROHIBITIONS—Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container. Do not store under conditions which might adversely affect the container or its ability to function properly.

STORAGE—Avoid freezing. Do not store below temperature of (40°F) If frozen, poor weed control may result. Store in safe manner. Store in original container only. Keep container tightly closed when not in use. Reduce stacking height where local conditions can effect package strength. Personnel should use clothing and equipment consistent with good pesticide handling.

PESTICIDE DISPOSAL—Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL—Metal: 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. Plastic: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

DIRECTIONS FOR USE (continued)

TRIFLURALIN EC is a pre-emergence herbicide for use in ornamentals for the control of annual grasses and broadleaf weeds in nursery stock, ornamental trees, ornamental woody shrubs, ornamental groundcover, gladioli, roses, established flowers and under paved surfaces.

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

ORNAMENTAL WOODY SHRUBS

Scientific Name	Common Name
<i>Berberis mentorensis</i>	Barberry
<i>Berberis Thunbergii</i>	Japanese Barberry
<i>Buxus harlandii</i>	Harlandii Boxwood
<i>Buxus microphylla</i>	Boxwood
<i>Buxus sempervirens</i>	Common Boxwood
<i>Camellia japonica</i>	Camellia
<i>Camellia Sasanqua</i>	Sasanqua Camellia
<i>Cleyera japonica</i>	Sakaki
<i>Cotoneaster apiculata</i>	Cotoneaster
<i>Cotoneaster Zabelii</i>	Cotoneaster
<i>Deutzia</i>	Deutzia
<i>Elaeagnus pungens</i>	Elaeagnus
<i>Euonymus alatus</i>	Euonymus
<i>Euonymus Fortunei</i>	Euonymus
<i>Euonymus newport</i>	Euonymus
<i>Feijoa Sellowiana</i>	Pineapple Guava
<i>Forsythia</i>	Forsythia (Golden Bells)
<i>Ilex crenata</i>	Japanese Holly
<i>Ilex hetzi</i>	Holly
<i>Juniperus chinensis</i>	Juniper
<i>Juniperus conferta</i>	Shore Juniper
<i>Juniperus virginiana</i>	Red Cedar
<i>Kalmia latifolia</i>	Mountain Laurel
<i>Ligustrum erectum</i>	Privet
<i>Ligustrum japonicum</i>	Privet
<i>Ligustrum odoratissimum</i>	Privet
<i>Ligustrum ovalifolium</i>	California Privet
<i>Lonicera</i>	Honeysuckle
<i>Philadelphus Lemoinei</i>	Mock-Orange
<i>Pieris japonica</i>	Fetterbush
<i>Pittosporum Tobira</i>	Robira
<i>Podocarpum macrophylla</i>	Yew Pine
<i>Potentilla</i>	Cinquefoil
<i>Prunus caroliniana</i>	American Cherry-Laurel
<i>Pyracantha</i>	Firethorn
<i>Raphiolepis indica</i>	India Hawthorn
<i>Rhododendron indicum</i>	Azalea
<i>Rhododendron obtusum</i>	Rhododendron
<i>Salix</i>	Willow
<i>Spiraea vanhouttei</i>	Spiraea
<i>Springa vulgaris</i>	Common Lilac
<i>Taxus cuspidata</i>	Japanese Yew
<i>Taxus media</i>	Yew

Thuja occidentalis
Viburnum odoratissimum
Viburnum suspensum
Viburnum tomentosum
Viburnum wrightii
Weigela

American Arborvitae
Sweet Viburnum
Sandankwa Viburnum
Doublefile Viburnum
Viburnum
Weigela, Bristol Ruby

ROSES AND OTHER ESTABLISHED FLOWERS

Achillea	Lupinus
Ageratum	Marigold
Arctotis	Morning Glory
Aster	Nasturtium
Balsam	Nicotiana
Calendula	Periwinkle
California Poppy	Petunia
Calliopsis	Phlox
Carnation	Portulaca
Centaurea	Rudbeckia
Chrysanthemums	Salvia
Cosmos	Scabiosa
Dahlia	Shasta Daisy
Dianthus	Snapdragon
Dimorthea	Stock
Forget-me-not	Snow on the mountain
Four O'Clocks	Sunflower
Gaillardia	Sweet Alyssum
Gladiolus	Sweet pea
Ixora	Sweet William
Lobelia	Zinnia

ORNAMENTAL TREES

Scientific Name	Common Name
<i>Abies balsamea</i>	Balsam Fir
<i>Acer platanoides</i>	Norway Maple
<i>Acer rubrum</i>	Red Maple
<i>Acer saccharinum</i>	Silver Maple
<i>Acer saccharum</i>	Sugar Maple
<i>Betula pendula var. laciniata</i>	European White Birch
<i>Castanea mollissima</i>	Chinese Chestnut
<i>Cercis canadensis</i>	Redbud
<i>Cornus florida</i>	Flowering Dogwood
<i>Cornus Kousa</i>	Kousa Dogwood
<i>Fraxinum americana</i>	White Ash
<i>Gleditsia triacanthos</i>	Honey Locust
<i>Juglans nigra</i>	Black Walnut
<i>Larix leptolepis</i>	Japanese Larch
<i>Liquidambar styraciflua</i>	Sweetgum
<i>Liriodendron tulipifera</i>	Tuliptree
<i>Malus sp.</i>	Apple
<i>Nyssa syriatica</i>	Black Gum
<i>Picea Abies</i>	Norway Spruce
<i>Picea glauca</i>	White Spruce
<i>Picea pungens</i>	Colorado Blue Spruce
<i>Pinus nigra</i>	Austrian Pine
<i>Pinus resinosa</i>	Red Pine
<i>Pinus Strobus</i>	White Pine
<i>Pinus sylvestris</i>	Scotch Pine
<i>Pinus taeda</i>	Loblolly Pine
<i>Pinus Thunbergii</i>	Japanese Black Pine
<i>Platanus acerifolia</i>	London Plane-Tree
<i>Platanus occidentalis</i>	Sycamore
<i>Populus deltoides</i>	Cottonwood
<i>Prunus sp.</i>	Stone-Fruits
<i>Pseudotsuga taxifolia</i>	Douglas Fir
<i>Quercus coccinea</i>	Scarlet Oak
<i>Quercus palustris</i>	Pin Oak
<i>Quercus rubra</i>	Red Oak
<i>Robinia pseudoacacia</i>	Black Locust
<i>Taxodium distichum</i>	Bald Cypress
<i>Tsuga canadensis</i>	Canada Hemlock

TRIFLURALIN EC Surface Applied and Water Incorporated for Preemergence Control of Annual Weeds in ESTABLISHED ORNAMENTAL GROUNDCOVER PLANTINGS

Scientific Name	Common Name
<i>Agapanthus</i>	Dwarf Peter Pan
<i>Armeria vulgaris</i>	Thrift-Sea Pink
<i>Achillea tomentosa</i>	Woolly Yarrow
<i>Asparagus densiflorus</i>	Asparagus
<i>Baccaris pilularis</i>	Dwarf Coyote Brush
<i>Campanula garganica</i>	Bellflower
<i>Campanula Poscharskyana</i>	Bellflower
<i>Ceanothus gloriosus</i>	Ceanothus
<i>Cerastium tomentosum</i>	Snow-in-Summer
<i>Ceratostigma plumbaginoides</i>	Bunge
<i>Cistus sp.</i>	Rock Rose
<i>Coreopsis sp.</i>	Tickseed
<i>Coronilla varia</i>	Crown Vetch
<i>Cotoneaster</i>	Cotoneaster

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Scientific Name	Common Name
<i>Fragaria chiloensis</i>	Strawberry
<i>Gazania sp.</i>	Copper King Gazania
<i>Gazania sp.</i>	Gold Rush Gazania
<i>Gazania sp.</i>	New Orange Gazania
<i>Gazania sp.</i>	Feasta Red Gazania
<i>Gazania sp.</i>	Bronze Orange Sunrise Gazania
<i>Gazania leucolaena</i>	Gazania
<i>Gazania sangelo</i>	Gazania
<i>Hedera canariensis</i>	Algerian Ivy
<i>Hedera helix</i>	Needlepoint Ivy
<i>Hedera helix</i>	California Ivy
<i>Herniaria glabra</i>	Rupture Wort
<i>Hypericum sp.</i>	St. John's-Wort
<i>Hypericum calycinum</i>	Rose-of-Sharon
<i>Hypericum coris</i>	St. John's-Wort
<i>Liriope muscari</i>	Big Blue Lilyturf
<i>Mesembryanthemum edentulum</i>	Ice Plant
<i>Muehlenbeckia axillaris</i>	Wire Plant
<i>Myoporum sp.</i>	Myoporum
<i>Myoporum laetum</i>	Myoporum
<i>Osteospermum sp.</i>	Trailing African Daisy
<i>Osteospermum fruticosum</i>	Trailing African Daisy
<i>Rosmarinus sp.</i>	Rosemary
<i>Sedum sp.</i>	Utah Sedum
<i>Sedum sp.</i>	Acres Sedum
<i>Sedum consufum</i>	Sedum
<i>Sedum guatemalense</i>	Sedum
<i>Sedum musaneuse</i>	Sedum
<i>Tagetes</i>	Marigold
<i>Taucrium Chamaedrys</i>	Germander
<i>Verbena sp.</i>	Verbena
<i>Verbena sp.</i>	Hybrid White Verbena
<i>Verbena sp.</i>	Hybrid Apple Blossom Verbena
<i>Verbena sp.</i>	Special Purple Verbena
<i>Verbena peruviana</i>	Verbena
<i>Veronica sp.</i>	Speedwell
<i>Zoysia tenuifolia</i>	Mascarene grass

WEEDS CONTROLLED

Annual Grasses	
Crabgrasses	Stinkgrass
Barnyardgrass (watergrass)	Bromegrass
Foxtails (including giant foxtail)	Brachiaria
Johnsongrass (from seed)	Sandbur
Wild Cane (shattercane)	Junglerice
Goosegrass	Annual bluegrass
Texas panicum	Sprangletop
	Cheat
Annual Broadleaf Weeds	
Pigweeds (spiny, redroot)	Purslane
Carelessweed	Florida purslane (pusley)
Lambsquarters	Knotweed
Carpetweed	Stinging nettle
Russian thistle	Goosefoot
Kochia	Chickweed

Note: TRIFLURALIN EC will not control certain resistant weeds such as Cocklebur, Velvetleaf, Jimsonweed, Ragweed, Venice Mallow, and Nutgrass.

GENERAL DIRECTIONS

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

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

MIXING AND APPLICATION DIRECTIONS

TRIFLURALIN EC is to be mixed with water and applied as a spray before, or in the same operation as soil incorporation. Apply in 5 to 40 gallons of water per acre (broadcast basis), using any properly calibrated low-pressure boom-type herbicide sprayer that will uniformly apply the spray. Pour the recommended amount of TRIFLURALIN EC for your soil type into the spray tank during the filling operation and mix thoroughly before spraying. Do not apply more than the recommended amount.

INCORPORATION DIRECTIONS

TRIFLURALIN EC must be incorporated into the soil after application to prevent loss of its activity. Spraying and incorporation should be done in the same operation, if possible. Incorporation may be delayed up to 4 hours after application. Variable weed control may result from delayed incorporation if this product is applied to a wet, warm soil surface or if the wind velocity is 10 mph or higher.

The machinery used for incorporation should break up large clods and mix the herbicide thoroughly with the soil. The more thoroughly the herbicide is mixed with the soil, the more consistent the weed control will be.

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

Water incorporation is used for established Ornamental Groundcovers. (See specific directions elsewhere on this label.)

Broadcast (Overall) Application Rates for Soil Incorporation Only:

Coarse Soils	Medium Soils	Fine Soils
Sand and sandy loam	Loam, silt loam and silt	Clay loam, silty clay and clay
1 pint per acre (1/2 pound active)	1 1/2 pints per acre (3/4 pound active)	2 pints per acre (1 pound active)

For band applications, use the following formula to figure the proportionate amount:

$$\frac{\text{band width in inches}}{\text{row width in inches}} \times \frac{\text{recommended broadcast rate}}{\text{amount to apply per acre on band}} = \text{amount to apply}$$

TRIFLURALIN EC is not recommended on muck soils.

Incorporation before planting (pre-plant): Thorough incorporation may be achieved with the following: *P.T.O.-driven equipment* (tillers, cultivators, hoes) set to cut 2 to 3 inches deep with rotors spaced to provide a clean sweep of the soil; *double disc* (or double disc with spiketooth harrow in tandem) set to cut 3 to 4 inches deep and operated in two different directions (cross disced) at 4 to 6 mph.; *mulch treader* and other similar disc-type implements set to cut 3 to 4 inches deep and operated twice at 5 to 8 mph.; *rolling cultivators* set to cut 2 to 4 inches deep and operated twice 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 *P.T.O.-driven equipment* (tillers, cultivators, hoes) set to cut 2 to 3 inches deep with rotors spaced to provide a clean sweep of the soil; or *rolling cultivators* set to cut 2 to 4 inches deep and operated twice at 6 to 8 mph. When incorporating TRIFLURALIN EC in transplants, new liners, or established plants, the implement should be adjusted so that treated soils is thrown toward and around the plants in the row.

Clean cultivate area to be treated before application since TRIFLURALIN EC 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 spiketooth or springtooth harrows alone for incorporation.

Surface Application and Water Incorporation to Ornamental Groundcover Plantings:

Add TRIFLURALIN EC to clean water in the spray tank during the filling operation. Agitate thoroughly prior to spraying. Apply in 5 to 40 gallons of water per acre using any properly calibrated low pressure herbicide sprayer that will uniformly apply the spray mixture. A one-half inch rain or its equivalent in sprinkler irrigation must be received within 24 hours or poor weed control will result.

Application Rate—Groundcovers Only: Apply 1 gallon of TRIFLURALIN EC per acre or 3 fluid ounces per 1,000 sq. ft. of groundcover area.

CHEMIGATION:

Refer to supplemental labeling entitled "APPLICATION THROUGH IRRIGATION SYSTEMS—CHEMIGATION" for use directions for chemigation. Do not apply this product through any irrigation systems unless the supplemental labeling on chemigation is followed.

Under Paved Surfaces:

Directions For Use and Site Preparation: TRIFLURALIN EC should be used only where the area to be treated has been prepared according to good construction practices. If rhizomes, stolons, tubers or other vegetative plant parts are present in the site, they should be removed by scalping with a grader blade to a depth sufficient to insure their complete removal.

Applications should be made only when final grade is established or after additions of base rock. Do not move soils following TRIFLURALIN EC application and do not apply this herbicide to areas where asphalt is to be laid directly on top of soil.

