

Do not apply in wind conditions which might affect product distribution. Wind may affect product distribution and move the product onto sensitive species. Uneven product distribution will result in marginal weed control.

Whenever applying this product safety glasses and rubber gloves should be worn. Under prolonged use a dust filter and mask are recommended.

Rout GS is not recommended for use in liner production beds; apply only to container and field grown ornamentals listed.

IMPORTANT NOTICE: LIMITATION OF LIABILITY

This product has been researched to provide necessary data to support its use on the ornamentals listed on the label. However, it is understood that tests have not been carried out under all growing conditions for all plants listed on the label. The user should always follow the label directions and exercise good judgment and caution when using the product on any given variety until familiar with the results under his growing conditions.

NO WARRANTY OR REPRESENTATION IS MADE, EXPRESSED, OR IMPLIED, CONCERNING THE RESULTS OBTAINED FROM THE USE OF THIS PRODUCT IF NOT USED IN ACCORDANCE WITH DIRECTIONS OR ESTABLISHED SAFE PRACTICE. The exclusive remedy of the user or BUYER, and the limit of liability of Sierra Chemical Company or any other Seller, for any and all losses, injuries or damages resulting from the use or handling of this product shall be the purchase price paid by the user or Buyer for the quantity of this product involved. The Buyer and all users are deemed to have accepted the terms of this Notice, which may be varied only by agreement in writing signed by a duly authorized representative of the Sierra Chemical Company.

Sierra Chemical Company, 1001 Yosemite Drive, Milpitas, California 95035

If you have any questions regarding the use of this product, feel free to call us. In Continental USA, call TOLL FREE 1-800-492-"TALK" or 8255. In California, call 408/263-8080.

BEST DOCUMENT AVAILABLE

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDES PROGRAMS
REGISTRATION DIVISION (WH-567)
WASHINGTON, D.C. 20460

EPA REGISTRATION NO.

DATE OF ISSUANCE
AUG 30 1984

TERM OF ISSUANCE

NOTICE OF PESTICIDE: REGISTRATION
 REREGISTRATION
(Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended)

NAME OF PESTICIDE PRODUCT

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

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NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.
Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

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ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL

AUG 30 1984

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3. Submit five (5) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 Enclosure for a further description of final printed labeling.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

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

Enclosure

RD/FHB:MOUNTFORT:DCR-25287:WANG-0453K:nns:Raven:479-2013:8/29/84

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Sierra Ornamental Herbicide

POINT:

ROUT(TM) GS

For Commercial Use Only

ROUT(TM) GS
Ornamental
Herbicide

For preemergence control of weeds in container and field grown ornamentals

WARNING: Keep out of reach of children. See back panel for additional caution statements.

Successful use of this product requires:

- Even distribution of particles at proper application rate.
- Application to dry foliage only.
- Application timing when plants are not breaking dormancy.
- Application at least two (2) weeks prior to enclosure in poly house.

ACTIVE INGREDIENTS:

Oxyfluorfen: 2-chloro-1-(3-ethoxy-4-nitrophenoxy)-4 (trifluoromethyl)benzene	2.00%
Oryzalin: 3,5-dinitro-N ⁴ , N ⁴ -dipropylsulfanilamide	1.00%

INERT INGREDIENTS:	97.00%
Total	100.00%

EPA Reg No _____ EPA Est _____ Product of U.S.A.

Sierra Chemical Company, 1001 Yosemite Drive, Milpitas, California 95035

ROUT(TM) GS is used by Sierra Chemical Company for its brand of ornamental herbicide (c) 1984.

Net weight 50 lbs. (22.6 kg)

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BACK:

ROUT(TM) GS
Ornamental Herbicide

For preemergence control of weeds in container and field grown ornamentals.

PRECAUTIONARY STATEMENTS:

Hazard to Humans and Domestic Animals: CAUTION, causes eye injury. Do not get in eyes, on skin, or on clothing. In case of contact immediately wash eyes or skin with plenty of water. Get medical attention if irritation persists. Harmful if swallowed. Avoid inhalation.

Environmental Hazards: Do not apply directly to water. This pesticide is toxic to wildlife and fish. Use with care when applying in areas adjacent to any body of water. Apply this product only as specified on the label. Do not contaminate water by cleaning of equipment or disposal of wastes.

DESCRIPTION:

Rout(TM) GS is a preemergent herbicide and does not control established weeds. Rout GS combines two selective compounds on one clay granule giving the ornamental grower a broader spectrum of weed control and ornamental plant tolerance. Rout GS is not registered for use on vegetable or edible fruit bearing crops, turf, bedding plants or greenhouse flowering crops.

STORAGE AND DISPOSAL:

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

Storage: Store in a dry place. Protect from water and extreme heat.

Pesticide Disposal: Pesticide or rinse water that cannot be used according to label instructions must be disposed of according to Federal, State, or local procedures under the Resource Conservation and Recovery Act.

Container Disposal: Dispose of bags according to approved Federal, State, or local procedures under the Resource Conservation and Recovery Act.

DIRECTIONS FOR USE:

It is a violation of federal law to use this product in a manner inconsistent with its labeling. For use on container and field grown ornamentals. This herbicide product has been extensively researched; however, testing has not been conducted on all species or cultivars, or under all growing conditions. In some instances performance characteristics may vary.

REPLACEMENT AVAILABLE

The species listed below have been tested under actual growing conditions and found tolerant at four times (4x) the recommended application rate.

Alyogyne

huegelii (Blue hibiscus)

Arctostaphylos

uva-ursi (Bearberry/Kinnikinnick)

Berberis

thunbergii 'Crimson Pygmy' (Crimson pygmy barberry)

Bougainvillea

spp. 'Barbara Karst'

Buxus

microphylla japonica (Japanese boxwood)

Codiaeum

norma 'Low Life' (Low life croton)

Cotoneaster

dammeri 'Coral Beauty' (Coral beauty cotoneaster)

Diosma

ericoides (Breath of heaven)

Escallonia

x exoniensis 'Fradesii'

Euonymus

alata 'Compacta' (Dwarf burning bush)

fortunei 'Vegeta'

Euphorbia

mille (Crown of thorns)

Gardenia

jasminoides 'August Beauty' (August beauty gardenia)

Gelsemium

sempervirens (Carolina jessamine)

Hibiscus

rosa-sinensis 'Brilliant' (Brilliant hibiscus)

rosa-sinensis 'Crown of Bohemia'

Hypericum

spp. (St. johnswort)

Iberis

sempervirens (Evergreen candy tuft)

Ilex

cornuta 'Burfordii' (Burford Holly)

cornuta 'Burfordii Nana' (Dwarf burford holly)

cornuta 'Rotunda' (Dwarf chinese holly)

verticillata 'Shillings' (Shillings holly)

Jasminum

nitidum (Jasminum magnificum) (Angelwing jasmine)

Juniperus

chinensis 'Gold Coast' (Gold coast juniper)

chinensis 'Mint Julep' (Mint julep juniper)

chinensis 'Pfitzeriana Glauca' (Blue pfitzer juniper)

chinensis 'Pfitzeriana Old Gold' (Old gold juniper)

chinensis sargentii viridis (Green sargent juniper)

chinensis 'Sea Green' (Sea green juniper)

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conferta (Shore juniper)
horizontalis 'Bar Harbor' (Bar harbor juniper)
horizontalis 'Douglasii' (Waukegan juniper)
horizontalis 'Plumosa' (Andorra juniper)
sabina 'Tamariscifolia' (Tam juniper)
squamata 'Blue Star' (Blue star juniper)
Lagerstroemia
indica (Crape myrtle)
Lantana
montevidensis 'Radiation'
Ligustrum
japonicum 'Texanum' (Waxleaf privet, Texas Privet)
lucidum (Glossy privet)
sinense 'Variegata' (Dwarf variegated chinese privet)
spp. 'Jack Frost' (Jack frost ligustrum)
'Vicaryi' (Vicary golden privet)
Microbiota
decussata
Nerium
oleander (Oleander)
Photinia
fraseri
Picea
abies 'Ohlendorffii' (Norway spruce)
glauca 'Conica' (Dwarf alberta spruce)
Pieris
japonica 'Mountain Fire' (Mountain fire andromeda)
Pinus
'Elliottii' (Slash pine)
resinosa (Mugo pine)
radiata (Monterey pine)
strobus (Eastern white pine)
thunbergiana (Japanese black pine)
Pittosporum
crassifolium (Evergreen pittosporum)
tenuifolium
tobira (Green pittosporum)
tobira 'Wheeler's Dwarf'
Raphiolepis
indica 'Ballerina' (India hawthorn)
indica 'Pinkie' (India hawthorn)
indica 'Pink Cloud' (Pink cloud raphiolepis)
Rhododendron
spp. 'Coral Bell' (Azalea)
spp. x exbury (Azalea)
spp. 'Hino Crimson' (Azalea)
spp. 'Snow' (Azalea)
Salvia
farinacea (Dwarf blue salvia)
Schefflera
arboricola (Dwarf schefflera)

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Thuja

- occidentalis nigra
- occidentalis ellwageriana aurea 'Tom thumb'
- occidentalis 'Hetz's Midget' (Hetz midget arborvitae)
- occidentalis 'Smaragd' (Emerald arborvitae)

Trachelospermum

- asiaticum 'Oblanceolatum' (Dwarf asiatic jasmine)
- asiaticum 'Solo' (Asiatic jasmine)
- asiaticum 'White Mist' (Variegated asiatic jasmine)

Verbena

- peruviana (Sand verbena)

Viburnum

- plicatum tomentosum (Double file viburnum)

Weigela

- 'Brooskop Glory'

The species listed below have been tested and found not tolerant.

Euonymus

- fortunei 'Emerald 'n Gold' (Emerald 'n gold euonymus)
- japonica 'Silver King' (Silver king euonymus)

Euryops

- pectinatus (Greyleaf daisy)

Ficus

- repens (Creeping fig)

Ilex

- crenata 'Helleri' (Helleri juniper)

Potentilla

- fruticosa (Potentilla)

Rout GS has been found to give preemergent weed control of the following weeds:

Grassy Weeds

- | | |
|------------------|------------------------------------|
| Annual bluegrass | (<u>Poa annua</u>) |
| Barnyardgrass | (<u>Echinochloa crusgalli</u>) |
| Crabgrass | (<u>Digitaria sanguinalis</u>) |
| Fall panicum | (<u>Panicum dichotomiflorum</u>) |
| Foxtail, green | (<u>Setaria viridis</u>) |
| Foxtail, yellow | (<u>Setaria lutescens</u>) |
| Goosegrass | (<u>Fleusine indica</u>) |

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Broadleaf Weeds

Bittercress	(<u>Cardamine pensylvanica</u>)
Chickweed, Common	(<u>Stellaria media</u>)
Dandelion	(<u>Taraxacum officinale</u>)
Groundsel	(<u>Senecio vulgaris</u>)
Lambsquarter	(<u>Chenopodium album</u>)
Oxalis	(<u>Oxalis stricta</u>)
Pigweed	(<u>Amaranthus retroflexus</u>)
Purslane	(<u>Portulaca oleracea</u>)
Shepherdspurse	(<u>Capsella bursa-pastoris</u>)
Sowthistle	(<u>Sonchus arvensis</u>)
Spurge, hairy	(<u>Euphorbia vermiculata</u>)
Spurge, spotted	(<u>Euphorbia maculata</u>)

APPLICATION RECOMMENDATIONS

The grower should use reasonable judgment and caution with this product. Until familiar with results under his growing conditions, untreated check blocks should be left in each variety for performance comparisons.

Apply Rout GS in the spring prior to weed seed germination or following complete weed removal. Repeat applications are required at three (3) month intervals during the growing season. If weed seed germination is observed prior to three (3) month normal application, product can be reapplied as recommended, but not less than two (2) months after previous application. Fall applications should be made two (2) weeks prior to placing plants in enclosed greenhouse structures.

Rout GS should be applied at the recommended rate with a properly calibrated rotary or drop-type spreader which will assure accurate, even particle distribution. Do not disturb the soil surface once the product has been applied as the herbicide barrier will be broken. Best results are obtained when the product is watered in with approximately 1/2 inch of water immediately following application. Adequate moisture is required to activate the herbicide and wash particles off the foliage.

Growers can determine if proper rate and distribution is being achieved by using a Sierra Rate Calibrator which is available free from Sierra Chemical Company. This simple tool allows you to quickly calibrate your application method.

Application Rates

	<u>Amount of Rout (M) GS</u>
Square Foot	1 g
100 Square Feet	100 g
Acre	100 lbs
Square Meter	10.8 g
100 Square Meters	1.1 kg

1 ounce = 28 grams (g)

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Container Grown Ornamentals

Potted liners - Remove established weeds from liners prior to transplanting into containers. Following planting and prior to chemical application irrigate with approximately 1/2 inch water to firm potting media around root systems. Allow foliage to dry. Broadcast product evenly over the container growing area. Water in with approximately 1/2 inch of water immediately after application.

Bare-root liners - Remove established weeds before herbicide application. Broadcast product evenly over the container growing area three (3) weeks after potting. Irrigate with approximately 1/2 inch of water immediately after application.

Field Grown Ornamentals

Apply immediately after planting or in the spring prior to weed seed germination or following complete weed removal. Loosen the soil by light cultivation prior to application. Broadcast product evenly over the soil surface. Irrigate with approximately 1/2 inch of water immediately after application and leave the soil undisturbed.

PRECAUTIONS

Do not apply product directly to bare roots of woody ornamentals as injury may result.

Do not apply product to moist foliage. Should this happen, irrigate immediately to completely remove herbicide particles from leaf surfaces.

Do not apply to whorl-leaved plants whose leaves channel the herbicide granules to the leaf base. Examples of such plants include Yucca spp. and Dracaena spp.

Do not apply product in enclosed greenhouse structures. Product vapors may cause ornamental injury and defoliation.

Product should not be applied two (2) weeks prior to or two (2) weeks following leaf bud break, or during periods of flush growth. Newly forming leaves are particularly sensitive to this product. Spotting or leaf drop may result from such applications.

Do not wait longer than three (3) months to reapply. Three months is the maximum residual for Rout GS. During periods of extreme temperature/ rainfall conditions product applications may be required at two (2) month intervals.

Do not disturb the soil surface following application as the herbicide barrier will be broken, resulting in less than optimum weed control.

Do not incorporate product into potting media or soil. Dilution of the active ingredient and possible injury to plant roots may result.