

SEP 7 1993

James Yowell  
Griffin Corporation  
P.O. Box 1847  
Valdosta, GA 31603

Dear Mr. Yowell:

Subject: Add Treatment of Cellulose  
Spin Out  
EPA Registration No. 1812-346  
Your Submission Dated August 24, 1993

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended is acceptable provided that you:

1. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:

- Delete "or printed". This phrase is not clear. You must give adequate directions on how the applicator would "print" paper with Spin Out.

2. Submit one (1) copy of your final printed labeling before you release the product for shipment.

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

Sincerely yours,



for Cynthia Giles-Parker  
Product Manger (22)  
Fungicide Herbicide Branch  
Registration Division (H7505C)

Enclosure

20/12

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

# Spin Out™

8/93

SEP 7 1993

LIQUID FLOWABLE

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

ROOT CONTROL COATING FOR  
CONTAINER-GROWN PLANTS

1812-346

Active Ingredient

Copper Hydroxide .....	7.1%
Inert Ingredients .....	92.9%
Total .....	100.0%

(Metallic Copper Equivalent 4.6%)

**KEEP OUT OF REACH OF CHILDREN  
CAUTION  
STATEMENT OF PRACTICAL TREATMENT**

**IF IN EYES:** Hold eyelids open and flush with water for 15 minutes. Get medical attention if irritation persists.

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

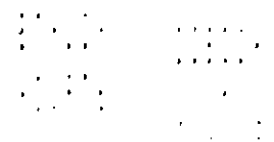
**IF INHALED:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

**BEST AVAILABLE COPY**

Griffin Corporation  
Valdosta, GA 31601

EPA Reg. No. 1812-346  
EPA Est. No. 8901-FX-1

NET CONTENTS \_\_\_\_\_ gallons



12

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**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
CAUTION**

Harmful if absorbed through skin or inhaled. Avoid contact with skin, eyes or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

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**ENVIRONMENTAL HAZARDS**

) This pesticide is toxic to fish and aquatic organisms. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by disposal of equipment washwaters.

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**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal. Store in a cool, dry place.

**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 incinerate, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

OR

Empty, unrinsed container can be used as a nursery growing container. Allow Spin-Out coating to dry on container walls and punch 3-5 holes in container bottom for use as a pot.

**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 through any type of irrigation system.

**BEST AVAILABLE COPY**

### GENERAL INFORMATION

Spin Out is a plant growth regulator for use on plastic or cellulose nursery containers as a root pruning agent to control root spiraling and promote the development of a fibrous root system. Spin Out can be used on container-grown woody ornamental and herbaceous plant species and non-bearing fruit and nut crops. Use Spin Out at any stage of plant development from seedlings to large container-grown trees. Do not apply Spin Out directly on plants or soil.

### APPLICATION DIRECTIONS

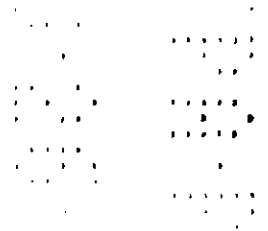
Nursery containers should be clean and dry before applying Spin Out. Used containers should be free of any loose soil. Stir Spin Out well before use and DO NOT dilute. Apply Spin Out to the inner surfaces of plastic or cellulose containers using conventional spray paint equipment or line containers with paper that has been sprayed or printed with Spin Out to cover the inner surface of containers. Follow all directions and precautions for the specific sprayer being used. Spin Out can also be applied using a brush or sponge. Spin Out should be applied evenly to the entire inner surface of the container.

Thorough coverage with one application of Spin Out is sufficient for root control. Allow Spin Out to dry on containers for 30-60 minutes under good drying conditions before stacking or planting. Spin Out is thoroughly dry when it changes from dark to a light gray color. When restacking, do not push containers tightly together to prevent scratching the Spin Out coating. Treated containers can be stored for up to 1 year before use. Use water to clean up equipment after using Spin Out. Refer to the sprayer equipment owner's manual for specific instructions on equipment clean up.

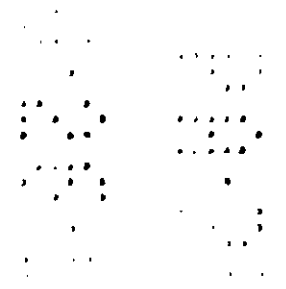
Spin Out has been extensively researched; however, testing has not been conducted on all species or cultivars, or under all growing conditions. In some instances performance characteristics may vary.

The species listed below have been tested under actual growing conditions.

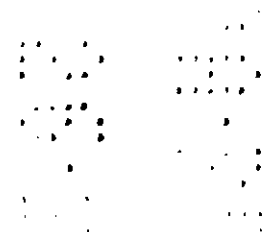
<u>Scientific Name</u>	<u>Common Name</u>
Abies amabilis	Pacific silver fir
Acer palmatum	Japanese maple
Acer platanoides	Norway maple
Acer rubrum	Red maple
Acer saccharinum	Silver maple



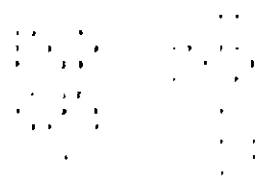
Acer saccharum	Sugar maple
Acorus gramineus	Sweet-flag
Ageratum sp.	Floss flower
Amelanchier canadensis	Shadblow
Aronia arbutifolia	Chokeberry
Artemisia ludoviciana	Dusty miller
Astilbe x arendsii	False spirea
Begonia sp.	Begonia
Berberis thunbergii	Barberry
Betula nigra	River birch
Browallia	Sapphire flower
Buxus microphylla koreana	Korean boxwood
Buxus microphylla var. japonica	Japanese boxwood
Buxus sempervirens	Boxwood
Calluna vulgaris	Heather
Campanula carpatica	Bellflower
Carex morrowi variegata	Sedge
Carya illinoensis	Pecan
Ceratostigma plumbaginoides	Blue ceratostigma
Cercis canadensis	Red bud
Chionanthus retusus	Chinese fringe tree
Chlorophytum comosum	Spider plant
Citrus sp.	Citrus



Clematis sp.	Clematis
Coleus x hybridus	Coleus
Coreopsis verticillata	Threadleaf coreopsis
Cornus florida	Flowering dogwood
Cornus kousa	Chinese dogwood
Cortaderia selloana	Pampas grass
Cotoneaster apiculata	Willowleaf cottoneaster
Cotoneaster divaricatus	Spreading cotoneaster
Cotoneaster salicifolius	Willowleaf cotoneaster
Cupressocyparis Leyland	Leyland Cypress
Dendranthema hybrids	Mums
Dianthus barbatus	Sweet William
Dieffenbachia sp.	Dumb cane
Diospyros virginiana	Common persimmon
Euonymus alatus	Winged euonymus
Euonymus fortunei	Wintercreeper euonymus
Festuca cinerea	Ornamental fescue
Forsythia intermedia	Forsythia
Fothergilla gardenii	Fothergilla
Fraxinus americana	White ash
Fraxinus pennsylvanica	Green ash
Fuchsia hybrids	Fuchsia
Gingko biloba	Ginko



Gleditsia triacanthos var. inermis	Shademaster honeylocust
Gypsophila paniculata	Baby's breath
Hamamelis intermedia	Witch hazel
Hemerocallis hybrids	Daylily
Heuchera hybrids	Coral bells
Hibiscus syriacus	Rose-of-Sharon
Hosta lancifolia	Variegated hosta
Hydrangea paniculata	Panicle hydrangea
Hydrangea paniculata	Panicle hydrangea
Hypericum patulum	St. Johnswort
Iberis sempervirens	Candytuff
Ilex cassine	Dahoon holly
Ilex galbra	Compact inkberry
Ilex hybrids	Savannah and east palatka
Impatiens hybrids	Sultana
Juniperus horizontalis cultivars	Creeping juniper
Juglans nigra	Black walnut
Juniperus chinensis	Sargent's juniper
Juniperus sabina	Savin juniper
Juniperus virginiana	Eastern red cedar
Kerria japonica	Japanese Kerria
Koeleria glauca	Crested hair grass
Lagerstroemia indica	Crape myrtle



Leucothoe axillaris	Fetterbush
Liatris spicata	Gay feather
Ligustrum japonicum	Japanese privet
Lilium sp.	Lily
Liquidambar styracifolia	American sweetgum
Liriope muscari	Monkey grass
Liriope spicata	Creeping lily turf
Lonicera japonica	Japanese honeysuckle
Lythrum sp.	Purple-loose-strife
Magnolia grandiflora	Southern magnolia
Magnolia liliiflora	Star magnolia
Malus floribunda	Showy crabapple
Myrica pensylvanica	Bayberry
Nandina domestica	Heavenly bamboo
Nyssa sylvatica	Black tupelo
Ophiopogon japonicus	Mondograss
Paeonis japonica	Peony
Parkinsonia aculeata	Jerusalem thorn
Pelagonium x domesticum	Geranium
Pennisetum alopecuroides	Fountain grass
Petunia hybrida	Petunia hybrids
Phlox sp.	Phlox hybrids
Photinia x fraseri	Red tip photinia



Photinia serrulata

Chinese photinia

Picea glauca

White spruce

Picea sitchensis

Sitka spruce

Pieris japonica

Lilly-of-the-valley bush

Pinus contorta

Lodgepole pine

Pinus echinata

Shortleaf pine

Pinus elliotti

Slash pine

Pinus monticola

Western white pine

Pinus palustris

Longleaf pine

Pinus ponderosa

Ponderosa pine

Pinus strobus

Eastern white pine

Pinus taeda

Loblolly pine

Pinus thunbergiana

Japanese black pine

Potentilla fructosa

Shrubby cinquefoil

Prunus cistena

Purple-leaf sand cherry

Prunus laurocerasus

Cherry laurel

Prunus serrulata

Japanese flowering cherry

Prunus subhirtella

Higan cherry

Pseudotsuga menziesii var. gluca

Douglas fir

Pyracantha angustifolia

Firethorn

Pyrus calleryana

Bradford pear

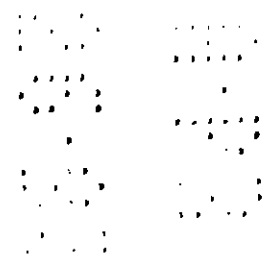
Quercus acutissima

Sawtooth oak

Quercus alba

White oak

Quercus falcata	Southern red oak
Quercus laurifolia	Laurel oak
Quercus palustris	Pin oak
Quercus prinus	Chestnut oak
Quercus rubra	Northern red oak
Quercus shumardii	Shumard oak
Quercus virginiana	Live oak
Rhamnus frangula	Tallhedge alder buckthorn
Rhododendron catawbiense	Catawba rhododendron
Rhododendron sp.	Azalea hybrids
Rhus aromatica	Sumac
Rosa hybrids	Rose
Salix babylonia	Weeping willow
Salix melanostachys	Willow
Spiraea japonica	Spirea
Spiraea nipponica	Snowmound spirea
Spiraea x bumalda	'Limemand' spiraea
Swietenia mahagomi	West Indies mahogany
Syringa vulgaris	Lilac
Tabebuia impetiginosa	Pink trumpet tree
Tagetes sp.	Marigold hybrids
Taxodium distichum	Bald cypress
Taxus x media	Anglojap yew



Thuja occidentalis	American arborvitae
Thuja plicata	Western red cedar
Trachycarpus fortunei	Windmill palm
Tsuga heterophylla	Western hemlock
Ulmus parvifolia	Chinese elm
Viburnum dentatum	Arrowwood viburnum
Viburnum lantana	Wayfaringtree viburnum
Viburnum macrocephalum	Chinese snowball
Viburnum opulus	European cranberry-bush
Viburnum plicatum	Doublefile viburnum
Viburnum trilobum	Compact cranberrybush viburnum
Viburnum x juddi	Judd viburnum
Viburnum x rhytidophylloides	Viburnum 'Willowwood'
Viola wittrockiana	Pansy hybrids
Vitex agnus-castus	Chaste-tree
Weigela florida	Pink weigelia
Wisteria floribunda	Japanese wisteria
Yucca filamentosa	Yucca

**BEST AVAILABLE COPY**

**NOTICE OF WARRANTY**

GRIFFIN warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of

12.4.12

GRIFFIN. In no case shall GRIFFIN be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the Buyer. GRIFFIN MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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