

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Bill Washburn Setre Chemical Company 7664 Smythe Farm Road Memphis, TN 38120

MAY 0 8 2013

Subject:

Label Amendment – Various Label Changes

XL₂G

EPA Reg. No. 38167-30

Application Dated – July 30, 2012

Dear Mr. Washburn,

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

Amended labeling will supersede all previously accepted ones. A stamped copy of labeling is enclosed for your records.

Submit one (1) copy of final printed labeling before you release the product for shipment. If you have any questions regarding this action, please contact Maggie Rudick at (703) 347-0257.

Sincerely,

Kathryn Montague

Product Manager 23

Herbicide Branch

Registration Division (7505P)

GROUP HERBICIDE 3

XL₂G

Contains oryzalin, the active ingredient in Surflan h A selective preemergence herbicide for control of c 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
- No
- Christmas tree plantations
- Non-cropland
- Established tall fescue and warm season turf (including bahiagrass, bermudagrass, buffalograss, centipedegrass, St. Augustinegrass, and zovsiagrass)

erbicides.	MAY 0 8 2013
ertain annual grasses and	AFAIN CO LOID
	Under the Federal Insecticide,
on-bearing berries	Fundade, and Redeminide Act

ACTIVE INGREDIENTS:

benefin: N-butyl-N-ethyl- α , α , α -trifluoro-2, 6- dinitro-p-toluidine	1.0%
oryzalin: 3,5-dinitro-N ⁴ ,N ⁴ -dipropylsulfanilamide	1.0%
OTHER INGREDIENTS	
Total	100.0%

Contains 1 pound active ingredient per 50 pound bag

Keep Out of Reach of Children

CAUTION

PRECAUCION

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

First Aid

If in eyes: 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 poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency medical assistance, call the National Pesticide Information Center 1-800-858-7378.

For chemical emergency: spill, leak, fire, exposure, or accident, call CHEMTREC 1-800-424-9300

Notice: Read the entire label. Use only according to label directions. Before using this product, read the Conditions of Sale and Limitation of Warranty and Liability at end of label booklet. If terms are unacceptable, return at once unopened.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 38167-30

Manufactured for: **Helena Chemical Company**

225 Schilling Blvd. Suite 300 Collierville, TN 38017

AD 013108

Specialty Herbicide

Net Wt. lb

EPA Est. No.

Precautionary Statements Hazards to Humans and Domestic Animals CAUTION

Causes moderate eye irritation. Avoid contact with eyes or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Coveralls over long-sleeved shirt and long pants
- Chemical resistant gloves
- Chemical resistant footwear
- Chemical resistant headgear for overhead exposure
- Chemical resistant apron (mixers and loaders)

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

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 toxic to fish and aquatic invertebrates. 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 contaminate water when disposing of equipment washwaters or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

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 (REI) of 24 hours. **Exception:** If the product is soil-injected 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 made of any waterproof material
- Shoes plus socks

4/23

Non-Agricultural Use Requirements

The requirements in 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.

Entry Restrictions for Non-WPS Uses: <u>Do not enter or allow others (including children and pets) to enter the treated areas (except those involved in the watering) until the watering is complete and the grass is dry.</u>

Storage and Disposal

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

Pesticide Storage: Store in original container only. In case of leak or spill, contain material and dispose as waste.

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: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available, or dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Product Information

XL 2G herbicide is a preemergence herbicide for control of certain annual grasses and broadleaf weeds in container and landscape ornamentals, nursery stock, ground covers, established tall fescue and warm season turf, established flowers, ornamental bulbs, non-bearing fruit and nut trees and non-bearing vineyards, non-bearing berries, Christmas tree plantations, non-cropland and established tall fescue and warm season turf (including bahiagrass, bermudagrass, buffalograss, centipedegrass, St. Augustinegrass, and zoysiagrass). Apply **XL 2G** prior to germination of target weeds or immediately after cultivation. Length of weed control will vary with rate of **XL 2G** applied; 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.

Use Precautions and Restrictions

Do not aerially apply this product.

Do not graze or feed forage from treated areas or orchards to livestock.

Landscape and field grown ornamentals: maximum number of applications per year is 2.

Ornamental bulbs: for fall application to coarse soils - maximum number of applications per year is 2.

Ornamental bulbs: applications February through March, all soils - maximum number of applications per year is 3.

Christmas tree plantations: maximum number of applications per year is 2.

Noncrop areas: maximum number of applications per year is 2.

XL 2G does not control established weeds. Existing weeds should be controlled by cultivation or with postemergence 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. This product must be watered-in immediately after application to dissolve the granules. A single rainfall or irrigation of % inch or more is required after product application.

For other applications, a single rainfall or sprinkler irrigation of 0.5 inches or more, or flood irrigation is required to activate **XL 2G**. If rainfall or irrigation has not occurred within 21 days of application and tillage is possible, **XL 2G** may be activated using cultivation equipment capable of uniformly mixing the herbicide into the upper 1-2 inches of soil. Failure to activate **XL 2G** may result in erratic weed control. Do not apply when wind conditions favor drift of **XL 2G** granules from the target area.

Users who wish to use **XL 2G** on plant species not allowed on this label may determine the suitability for such uses by treating a small number of such plants at an allowable rate. Prior to treatment of larger areas, the treated plants should be observed for any sign 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 use of XL 2G on plant species not allowed on this label.**

Application Directions

Apply **XL 2G** 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 crop 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 for Applying XL 2G

- When using a drop-type spreader, a splashboard mounted under the hopper will provide more even granule distribution.
- 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.
- For treating smaller areas or rows of nursery stock or ornamental beds, a hand held or push-type rotary applicator such as a whirlybird or cyclone unit is recommended. For hand held units, walk and turn the crank at a constant rate of speed.
- A shaker-type applicator made from a small container with holes punched in the bottom is recommended for small, difficult to treat areas. Carefully measure the amount of product needed to avoid over-application.

Approved Uses

Established[†] Container Grown Ornamentals, Established Tall Fescue and Warm Season Turfgrasses, Landscape Ornamentals, Nursery Stock, Ground Covers, Flowers, Ornamental Bulbs, Non-bearing Fruit and Nut Trees and Non-bearing Vineyards, Non-bearing Berries, Christmas Tree Plantations, and Non-cropland

XL 2G is labeled as a preemergence treatment for control of certain annual grasses and broadleaf weeds in container grown ornamentals, landscape ornamentals, nursery stock, ground covers, established tall fescue, warm season turfgrasses, established flowers, ornamental bulbs, non-bearing fruit and nut trees and non-bearing vineyards, non-bearing berries, Christmas tree plantations, and non-cropland. Apply **XL 2G** prior to germination of target weeds, or immediately after cultivation.

Broadcast Application Rates:

·	X	L 2G	Minimum Time Between Applications	Total Amount Allowed Per Year
Labeled Use Site	(lb/acre)	(lb/1000 sq ft)	(months)	(lb/acre)
Landscape Ornamentals	200	4.6	2	800
Field-grown and container-grown ornamentals	300	6.9	4	900

Note: Refer to the "Product Information" section of this label for use precautions and information on application.

Special Use Precautions To avoid possible plant injury, do not apply XL 2G to:

- plants or areas in greenhouses or other enclosed structures.
- plants that will bear fruits, berries, or nuts within 12 months of application.
- nursery seedbeds or forest or Christmas tree seedling 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.

- ornamental plantings where the likelihood of runoff onto lawn areas containing dichondra or cool season turfgrass species exists.
- Do not apply XL 2G to the following plant species or injury may occur:

Begonia spp. (begonia)

Coleus hybridus (coleus)

Deutzia gracilis (slender deutzia)

Pseudotsuga menziesii (Douglas-fir)

Thuia occidentalis 'Techny' (Techny arborvitae)

Tsuga canadensis (eastern hemlock)

Ice Plant: When establishing unrooted ice plant (Mesembryanthemum crystallinum and Carpobrutus edulis) on coarse soils, do not exceed the 200 lb/acre rate of **XL 2G** or crop injury may occur. After the ice plant is well established, a second application may be made.

[†]**Definition of established plantings:** Apply only to established plantings. Established plants are defined as those that have been transplanted into their final growing location for a sufficient period of time to allow the soil to be firmly settled around the roots from packing and rainfall or irrigation. Do not apply to seedbeds or seedling transplant beds.

Unlisted plant species: Users who wish to use XL 2G on plant species not allowed on this label may determine the suitability for such uses by treating a small number of such plants at a directed rate. Prior to treatment of larger areas, the treated plants should be observed for any sign 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 use of XL 2G on plant species not allowed on this label.

Weeds Controlled or Suppressed by XL 2G

Weeds controlled when XL 2G is applied at a rate of 200 to 300 pounds per acre (4.6 to 6.9 pounds per 1000 sq ft).

Annual Grasses:

Common Name	Scientific Name	Common Name	Scientific Name
barley, little	Hordeum pusillum	lovegrass, Mexican	Eragrostis mexicana
barnyardgrass	Echinochloa crus-galli	lovegrass, orcutt	Eragrostis orcuttiana
bluegrass, annual	Poa annua	oat, wild	Avena fatua
crabgrass	Digitaria spp.	panicum, browntop	Panicum fasciculatum
crowfootgrass	Dactyloctenium aegyptium	panicum, fall	Panicum dichotomiflorum
cupgrass, southwestern	Eriochloa gracilis	panicum, Texas	Panicum texanum
foxtail	Setaria spp.	ryegrass, Italian	Lolium multiflorum
goosegrass	Eleusine indica	sandbur, field	Cenchrus incertus
johnsongrass (seedling	Sorghum halepense	signalgrass	Brachiaria spp.
only)	Echinochloa colonum	sprangletop, red	Leptochloa filiformis
junglerice		witchgrass	Panicum capillare

Broadleaf Weeds:

Common Name	Scientific Name	Common Name	Scientific Name
bittercress	Cardamine oligosperma	pigweed	Amaranthus spp.
carpetweed	Mollugo verticillata	puncturevine	Tribulus terrestris
chickweed, common	Stellaria media	purslane, common	Portulaca oleracea
fiddleneck, coast	Amsinckia intermedia	pusley, Florida	Richardia scabra
filaree, redstem	Erodium cicutarium	rocket, London	Sisymbrium irio
filaree, whitestem	Erodium moschatum	rockpurslane, desert	Calandrinia ciliata
groundsel, common	Senecio vulgaris	shepherdspurse	Capsella bursa-pastoris
henbit	Lamium amplexicaule	spurge, prostrate	Euphorbia humistrata
knotweed, prostrate	Polygonum aviculare	woodsorrel, yellow	Oxalis stricta
lambsquarters, common	Chenopodium album		
• •			

In addition to the weeds controlled, the following weeds will be partially controlled or suppressed at 200 to 300 pounds per acre (4.6 to 6.9 pounds per 1000 sq ft).

Common Name	Scientific Name	Common Name	Scientific Name
horseweed	Conyza canadensis	nightshade, black	Solanum nigrum
ladysthumb	Polygonum persicaria	ragweed, common	Ambrosia artemisiifolia
lettuce, prickly	Lactuca serriola	smartweed	Polygonum pensylvanicum
mallow, common	Malva neglecta	sowthistle, annual	Sonchus oleraceus
milkweed, climbing	Sarcostemma cynanchoides	spurge, spotted	Euphorbia maculata
morningglory	Ipomoea spp.	teaweed (prickly sida)	Sida spinosa
mustard, black	Brassica nigra	velvetleaf	Abutilon theophrasti
mustard, wild	Brassica kaber	wheat, volunteer.	Triticum spp.

XL 2G May Be Used On The Following Established Plant Species: (Note limitations on treatment methods.)

Trees Scientific Name/Common Name	Treatment Method: C = Container Grown F = Field Grown
Abies balsamea	
Balsam fir	F
Abies concolor	
White fir	F
Abies fraseri	•
Fraser fir	F
Abies grandis	
Grand fir	F
Abies lasiocarpa	
Alpine fir	F
Abies veitchi	
Veitch fir	F
Abutilon hybridum	
Albus flowering maple	F
Luteus flowering maple	
Roseus flowering maple	F F
Tangerine flowering maple	F
Vesuvius red flowering maple	F
Acer spp.	
maple	F
Arecastrum romanzoffianum	·
Queen palm	F
Betula papyrifera	
Paper birch	F .
Betula nigra	
River birch	F
Betula pendula	
White birch	F
Bucida buceras	•
Black olive	F
Ceratonia siliqua	
Carob	F
Cercidium floridum	•
Blue palo verde	F
Cercis Canadensis	•
Redbud	C,F

Chamaecyparis lawsoniana	
Lawson falsecypress	F
Chamaecyparis obtusa spp.	•
Filicoides-fernspray cypress	F
Gracilis-slender Hinoki cypress	F
Chamaecyparis pisifera	_
Sawara-false cypress	F
Squarrosa-moss cypress	F
Chamaedorea cataractarum Cat palm	F
Chamaedorea costaricana	• *
Palm	F
Chamaedorea elegans	
Parlor palm	F
Cornus florida	_
Flowering dogwood Crupaniopsis anacardioides	F
Carrot wood	F
Cryptomeria japonica	•
Japanese cryptomeria	C,F
Cupressus glabra	
Arizona cypress	C,F
Cupressus sempervirens Italian cypress	C,F
Elaeagnus angustifolia	<i>U,1</i>
Russian olive	C,F
Eucalyptus cinerea	,
Mealy eucalyptus	F
Silver dollar eucalyptus	F
Eucalyptus camaldulensis	F
Red gum eucalyptus Eucalyptus nicholii	
Narrow-leaved eucalyptus	F
Eucalyptus sideroxylon	
Red ironbark eucalyptus	F
Ficus benjamina	_
Ficus	F
Fraxinus spp. Ash	F
Ginkgo biloba	,
Maidenhair tree	C,F
Gleditsia triacanthos	
Honey locust	F
Heteromeles arbutiflora	_
Toyon Juniperus virginiana	F
Eastern redcedar`	F
Kalmia latifolia	•
Mountain laurel	F
Koelreuteria paniculata	
goldenrain tree	F
Liquidambar styraciflua	~ r
American sweet gum Magnolia grandiflora	C,F
Southern magnolia	F
Malus spp.	•
Crabapple	F
Morus alba	
White mulberry	F
Olea euripaea	•

•	
Olive	F
Picea abies	
Norway spruce	F
Picea engelmanni Engelmann spruce	F.
Picea glauca	
Conica-dwarf Alberta spruce	F
White spruce	F
Picea mariana	_
Black spruce	F
Picea pungens spp.	F
Glauca-Colorado blue spruce Hoopsii-Hoop's blue spruce	F
Koster-Koster blue spruce	F
Pinus spp.	
Pine	C,F
Platanus occidentalis	_
American sycamore Platanus racemosa	. <i>F</i>
California sycamore	· F
Podocarpus spp.	•
Podocarpus	F
Populus deltoides	_
Cottonwood	, F
Prunus caroliniana	F
Carolina laurelcherry Prunus laurocerasus	,
English laurelcherry	F
Prunus mahaleb	
Mahaleb cherry	F
Prunus yedoensis	F
Yoshino flowering cherry Quercus spp.	
Oak	C,F
Salix babylonica	- , -
Babylon weeping willow	F
Corkscrew willow	F
Schinus molle	F
California pepper tree Sequoiadendron giganteum	Γ
Giant sequoia	F
Sequoia sempervirens	·
Coast redwood	F
Swietenia mahogani	_
Mahogany	F
Tabebuia caraiba Yellow tab	F
Tilia cordata	,
Littleleaf linden	C,F
Thuja plicata	,
Western redcedar	F
Ulmus parvifolia	
Chinese Elm Umbellularia californica	F
California laurel	F
Washingtonia robusta	•
Mexican fan palm	F

Ornamental Shrubs

Scientific Name/Common Name	Treatment Method: C = Container Grown F = Field Grown
Abelia grandiflora	1 - Held Grown
Glossy abelia	F
Acacia redolens	•
Prostrate acacia	F .
Agave americana	•
Century plant	F
Agave macroculmis	•
Agave	F
Arctostaphylos stanfordiana	
Stanford manzanita	F
Astilbe chinensis	
False spirea	C,F
Baccharis pilularis	
Coyotebush	F .
Berberis thunbergii	
Atropurea-Redleaf Japanese barberry	C,F
Aurea golden Japanese barberry	C,F
Crimson pygmy barberry	C,F
Bougainvillea spp.	_
Barbara Karst	Ę
California Gold	F
Scarlet O'Hara	F F
Texas Dawn	۴
Buxus microphylla	CE
Japonica-Japanese boxwood Littleleaf boxwood	C,F F
Buxus sempervirens	F
Common boxwood	C,F
Callistemon citrinus	0,1
Lemon bottlebrush	C,F
Ceanothus spp.	C ,.
Wild Iilac	C,F
Chamaecyparis obtusa spp.	;
Kosteri cypress	F
Nana-dwarf Hinoki cypress	F
Torulosa cypress	F
Chamaecyparis pisifera	
Filifera-thread cypress	F
Squarrosa minima-dwarf moss cypress	F
Chrysalidocarpus lutescens	
Areca palm	F
Cleyera japonica	•
Japanese cleyera	C,F
Cotoneaster adpressus	
Praecox-early cotoneaster	F
Cotoneaster apiculatus	
Cranberry cotoneaster	C,F
Cotoneaster buxifolius	
Brightbead cotoneaster	F
Cotoneaster congestus	
Pyrenees cotoneaster	F
Cotoneaster dammeri	C
Bearberry cotoneaster	C, F
Cotoneaster himalayan Himalayan cotoneaster	F
i iiinalayan coloneasiel	,

1 4	
Cotoneaster horizontalis	C,F
Rock cotoneaster Cotoneaster lacteus	U,1
Parney cotoneaster	C,F
Cotoneaster microphyllus	·
Rockspray cotoneaster	F
Cornus alba	
Sibirica-Siberian dogwood	F.
Cornus florida	F
Flowering dogwood Cornus kousa	1
Kousa dogwood	C,F
Cornus stolonifera	,
Flaviramea-yellowtwig dogwood	F
Cryptomeria japonica	0.5
Japanese cryptomeria	C,F
Cytisus praecox Holandia-warminster broom	F
Cytisus scoparius	
Lena-Scotch broom	F
Dasylirion wheeleri	
Desert spoon sotol	F
Deutzia crenata	_
Nakiana dwarf deutzia	. <i>F</i>
Dodonea viscosa Hopseed bush	F
Escallonia exoniensis	•
Escallonia	C,F
Euonymus alata	_
_ Winged euonymus	F
Euonymus fortunei	C,F
Canadale gold euonymus Emerald'n gold euonymus	C,F
Stringybark euonymus	C,F
Wintercreeper	C,F
Euonymus japonica	
Evergreen euonymus	C,F
Silver king euonymus	-
Euonymus kiautschovica	F
Spreading euonymus Fatshedera lizei	,
Fatshedera	C,F
Forsythia intermedia	ŕ
Forsythia	F.
Gardenia jasminoides	0.5
Gardenia Conista ciloso	C,F
Genista pilosa Woadwaxen	F
Hibiscus rosa-sinensis	,
Chinese hibiscus	F
Ross Estey hibiscus	F
Hibiscus syriacus	_
Rose of Sharon, Red Bird	F
Rose of Sharon, Red Heart	F F
Rose of Sharon,Woodbridge Hypericum spp.	Γ
St. Johnswort	F
llex aquifolium	-
Balkans holly	F
English holly	F

Gold coast holly	F
llex aquipernyi San Jose holly	C,F
llex cornuta	Ο,,
Chinese holly	C,F
Dwarf burford holly	C,F
llex crenata	~ r
Convexa holly Compacta-dwarf Japanese holly	C,F C,F
Helleri-Heller's Japanese holly	C,F
Japanese holly	C,F
llex glabra	•
Nordica-inkberry holly	F
llex meserveae	_
Blue girl holly Blue boy holly	F F
Ebony magic holly	F
llex vomitoria	•
Nana-dwarf yaupon holly	C,F
Pendula-weeping yaupon holly	C,F
Yaupon holly	C,F
Juniperus spp.	CE
Juniper Justicia brandegeana	C,F
Shrimp plant	C,F
Justicia spicigera	
Mexican honeysuckle	F
Lagerstroemia indica	0.5
Crape myrtle	C,F
Leucothoe axillaris Coast leucothoe	F
Leucothoe fontanesiana	,
Drooping leucothoe	F
Ligustrum amurense	
Amur privet	C,F
Ligustrum japonicum	C,F
Japanese privet Yellow tip ligustrum	C,F
Ligustrum texanum	0,1
Wax leaf privet	F
Howardi privet	F
Ligustrum lucidum	
Glossy privet	C,F
Ligustrum ovalifolium California privet	E
Ligustrum vicaryi	•
Vicary golden privet	C,F
Livistona chinensis	ŕ
Chinese fountain palm	F
Lonicera fragrantissima	_
Winter honeysuckle	F
Lonicera periclymenum Flowering woodbine	· F
Serotina woodbine	F
Lonicera sempervirens	
Trumpet honeysuckle	F
Mahonia aquifolium	_
Oregon grape	· •
Myoporum parvifolium Prostrate myoporum	F
ι τοσιταίο πιγοροιαπί	,

Myrtus communis	C,F
True myrtle Nandina domestica	0,1
Compacta-dwarf heavenly bamboo	C,F
Harbour-dwarf heavenly bamboo	C,F
Heavenly bamboo	C,F
Nana compacta- heavenly bamboo	C,F
Nana purpurea-heavenly bamboo	C,F
Woods-dwarf heavenly bamboo	C,F
Nerium oleander	C,F
Hardy red oleander Oleander	C,F
Ruby lace oleander	C,F
Osmanthus heterophyllus	,
Holly-leaf osmanthus	F
Pachysandra terminalis	• _
Japanese spurge	F
Philadelphus spp.	C,F
Mockorange	<i>U,1</i>
Phoenix roebelenii Pygmy date palm	F
Photinia fraseri	•
Fraser's photinia	C,F
Picea abies `	
Repens-spreading Norway spruce	F F
Pendula-weeping Norway spruce	۲
Pieris japonica	C,F
Andromeda Lily-of-the-valley	
Snowdrift	F F
Temple bells lily-of-the-valley	F
Valley rose lily-of-the-valley	F
Pittosporum spp.	٥٦
Pittosporum	C,F
Platycladus orientalis Oriental arborvitae	· C,F
Plumbago ariculata	0,,
Blue cape plumbago	F
Podocarpus macrophyllus	
Yewpine	C,F
Potentilla fragiformis	_
Cinquefoil	F
Potentilla fruticosa	C,F
Cinquefoil Protea neriifolia	0,1
Protea	F
Pyracantha coccinea	
Scarlet forethorn	C,F
Pyracantha fortuneana	0.5
Lalendel Monrovia pyracantha	C,F
Monon pyracantha	C,F C,F
Red elf hybrid pyracantha Rutgers hybrid pyracantha	C,F
Santa Cruz pyracantha	C,F
Victory pyracantha	Ĉ,F
Pyracantha skoidzumi	•
Formosa firethorn	C,F
Rhaphiolepis indica	_
Enchantress-Moness rhaphiolepis	C.F
India hawthorn	U, <i>F</i>

Springtime-Monme rhaphiolepis	F
Rhaphiolepis ovata	_
Round-leaf rhaphiolepis	F
Rhipsalidopsis gaetneri Easter cactus	C,F
Rhododendron spp.	Ο,,
Azalea	C,F
Rhododendron	C,F
Rhus lancea	<u>С</u> Г
African sumac Rosa rugosa	C,F
Ramanas rose	F
Rosmarinus officinalis	
Rosemary	F
Spiraea vanhouttei	_
Bridal wreath Syringa vulgaris	F
Common lilac	F
Syzygium paniculata	·
Brush cherry	C,F
Taxus cuspidata	_
Japanese yew	F
Taxus media Yew	F
Thuja occidentalis	•
American arborvitae	F
Emerald arborvitae	F
Globosa-globe arborvitae	F
Little Giant-dwarf arborvitae	F F
Nigra-dark American arborvitae Pyramidalis arborvitae	F
Rheingold arborvitae	, F
Woodwardii arborvitae	F
Thuja orientalis	_
Aurea nana-dwarf golden arborvitae	F
Minima glauca-dwarf arborvitae Trachelospermum jasminoides	
Chinese star jasmine	F
Veitchia merilli	•
Christmas palm	F
Viburnum davidii	_
David viburnum	F
Viburnum japonicum Viburnum	F
Viburnum opulus sterile	•
Eastern snowball viburnum	F
Viburnum plicatum tomentosum	
Doublefile viburnum	·F
Viburnum x pragense	F
Virburnum Viburnum setigerum	
Tea viburnum	F
Viburnum suspensum	
Sandankwa viburnum	F
Viburnum tinus	_
Compactum-spring bouquet viburnum	F C.F
Laurastinus viburnum Viburnum trilobum	C,F
Compactum-dwarf cranberry bush	F
Weigela florida	

Java red weigela	F
Bristol ruby weigela	F
Minuet weigela	F
Xylosma congestum	·
Xylosma	F
Yucca elata Soaptree yucca	C,F
Yucca recurvifolia Pendulous yucca	F

Ground Covers

Ground Covers	
	Treatment Method: C = Container Grown
Scientific Name/Common Name	<u>F = Field Grown</u>
Agapanthus africanus	0 F
Lily-of-the-Nile	C,F
Ajuga spp.	_
Carpet bugle	F
Arctotheca calendula	
Cape weed	F
Campanula elatines	0 5
Bellflower	C,F
Carpobrotus edulis	·
Largeleaf iceplant	F
Clytostoma callistegioides	0.5
Violet trumpet vine	C,F
Cortaderia selloana	
Pampas grass	F
Delosperma alba	_
White iceplant	F
Drosanthemum floribundum	_
Trailing rosea iceplant	F
Festuca ovina	
Blue fescue	F .
Gazania spp.	-
Gazania	F
Hedera canariensis	<u>.</u>
Algerian ivy	F
Hedera helix	_
English ivy	F
Hemerocallis spp.	
Day lily	C,F
Hosta spp.	
Plantain lily	C,F
Hypericum spp.	
St. Johnswort	F
Lampranthus spectabilis	_
Red trailing iceplant	F
Liriope gigantea	_
White lily turf	F
Liriope muscari	•
Big blue lily turf	C,F
Lilac beauty lily turf	C,F
Majestic lily turf	C,F
Monroe white lily turf	C,F
Silvery sunproof lily turf	C,F
Variegated liriope lily turf	C,F
Lonicera japonica	_
Japanese honeysuckle	F.
Mesembryanthemum crystallinum	

lce plant	F
Ophiopogon japonicus	
Mondo grass	. F
Osteospermum fruticosum	•
Trailing African daisy	F
Sedum brevifolium	
Stonecrop	F
Trachelospermum jasminoides	
Chinese star jasmine	F
Vinca major	
Bigleaf periwinkle	F
Vinca minor	
Dwarf periwinkle	F

Established Flowers

Soiontifia News/Gommon News	Treatment Method: C = Container Grown
Scientific Name/Common Name	F = Field Grown
Achillea spp.	F
Yarrow Antigrhinum maius	. .
Antirrhinum majus	F
Snapdragon Caladium bicolor	<i>r</i>
Fancy-leaved caladium	F
Chrysanthemum coccineum	F
Painted daisy	F
Chrysanthemum maximum	
Shasta daisy	F
Chrysanthemum morifolium	-
Chrysanthemum	F
Coreopsis lanceolata	F
Coreopsis	F
Dianthus barbatus	
Sweet william	F
Dicentra spectabilis	,
Bleeding heart	C,F
Dimorphotheca spp.	, 0,1
Cape marigold	· F
Echinacea purpurea	•
Purple coneflower	F
Geum quellyon	,
Geum	F
Gladiolus hortulanus	
Gladiolus	F .
Gypsophila paniculata	
Baby's breath	F
Impatiens wallerana	•
Impatiens	· F
Iris spp.	
Bearded iris	F
Liatris spicata	
Blazing star	C,F
Pelargonium hortorum	
Geranium	F
Petunia spp.	•
Petunia	F
Portulaca grandiflora	
Rose moss	F
Ranunculus asiaticus	

Persian ranunculus	F
Rosa spp.	
Rose	F
Rudbeckia hirta	
Gloriosa daisy/black-eyed susan	F
Salvia spp.	
Sage	F
Stokesia laevis	
Stokes aster	F
Strelitzia reginae	-
Bird of paradise	F
Tagetes spp.	
Marigold	F
Viola wittrockiana	
Pansy	F
Zinnia elegans '	
Common zinnia	F

Non-bearing Fruit and Nut Trees and Non-bearing Vineyards †
Treatment Method:

	C = Container Grown
Common Name	F = Field Grown
Almond	F
Apple	F
Apricot	F
Avocado	F
Cherry, sour	F
Cherry, sweet	F
Fig	F
Filbert	F
Grape, American	, F F F C,F
Grape, European	F
Grapefruit	F
Kiwi	F
Kumquat	C,F
Lemon	F
Macadamia nut	F .
Nectarine	F
Olive	F
Orange	C,F
Peach	F
Pear	F
Pecan	C,F
Pistachio	. <i>F</i>
Plum '	F
Pomegranate	F
Prune	F .
Walnut, black	F
Walnut, English	F

† Non-bearing fruit and nut trees and non-bearing vineyards are defined as plants that will not bear fruit for at least one year after treatment. Do not apply to plants that will bear fruits, berries or nuts within 12 months of application.

Non-bearing Berries †

Treatment Method:
C = Container Grown
Common Name
Blackberry
Blueberry
F
Boysenberry
F
F

Filename: Setre XL 2G (38167-30) 122612 CLN

Currant		F
Dewberry		F
Elderberry		F
Gooseberry		F
Loganberry		F
Raspberry		F

[†] Non-bearing berries are defined as plants that will not bear berries for at least one year after treatment. Do not apply to plants that will bear fruits, berries, or nuts within 12 months of application.

Ornamental Bulbs

Special Use Precautions

Do not apply to tulip plants that have emerged to a height greater than 3/4 inch. Deep till prior to planting any crop after this use.

Do not apply to gladioli prior to emergence or to plants less than one inch in diameter.

Application Rates, Frequency, and Timing of Applications

XL 2G may be applied for annual weed control in ornamental bulbs such as bulbous iris, daffodil (narcissus), hyacinth, and tulip. Apply XL 2G to the soil surface two (2) to four (4) weeks after planting and final hilling but prior to the emergence of annual weeds. XL 2G may also be applied following bulb emergence. For fall-planted bulbs, apply XL 2G again in late winter or early spring to weed-free soil surfaces.

Broadcast Application Rates

Time of		HELEI	NA® XL 2G	Minimum Time Between Applications	Total Amount Allowed Per Year
Application	Soil Texture	(lb/acre)	(lb/1000 sq ft)	(months)	(lb/acre)
Fall	Coarse	75	1.7	3	150
Fall	Medium and Fine	150	3.4	3	225
Feb March	All Soil Textures	75	1.7	. 3	225

Christmas Tree Plantations

Apply **XL 2G** to established plantings of labeled field grown Christmas tree species prior to germination of target weeds. Do not apply to Douglas fir (Pseudotsuga menziesii) or Eastern hemlock (Tsuga canadensis). Do not apply to seedbeds or seedling transplant beds. Apply only to established plantings. Established plants are defined as those that have been transplanted into their final growing location for a sufficient period of time to allow the soil to be firmly settled around the roots from packing and rainfall or irrigation.

Broadcast Application Rates

Length of	HELENA® XL 2G		Minimum Time Between Applications	Total Amount Allowed Per Year
Control	(lb/acre)	(lb/1000 sq ft)	(months)	(lb/acre)
2 - 4 months	200	4.6	2	800

Note: Refer to the "Product Information" section of this label for use precautions and information on application. Refer to "Approved Uses" section of this label for special use precautions and information weeds controlled.

Noncropland Areas: Industrial Sites, Utility Substations, Highway Guardrails, Sign Posts, and Delineators

XL 2G is labeled as a preemergence treatment for control of certain annual grasses and broadleaf weeds on industrial sites, utility substations, highway guardrails, sign posts, and delineators. Apply **XL 2G** prior to germination of target weeds. Areas to be treated should be free of established weeds or existing weeds should be controlled with postemergence herbicides.

Broadcast Application Rates

Length of	HELEI	NA® XL 2G	Minimum Time Between Applications	Total Amount Allowed Per Year
Control	(lb/acre)	(lb/1000 sq ft)	(months)	(lb/acre)
2 - 4 months	200	4.6	2	400

Note: Refer to the "Product Information" section of this label for use precautions and information on application. Refer to "Approved Uses" section of this label for special use precautions and information weeds controlled.

Warm Season Turfgrasses

XL 2G may be applied as a preemergence treatment for control of annual grasses and certain broadleaf weeds in established warm season turf including bahiagrass, bermudagrass, buffalograss, centipedegrass, St. Augustinegrass and zoysiagrass or established tall fescue growing in warm season areas. Established turf is defined as a dense turf having a well-anchored root system and healthy, vigorous top growth.

Successful preemergence control of weeds listed on this label requires that **XL 2G** be applied prior to weed germination and be activated by at least one-half (1/2) inch of rainfall or irrigation within 21 days of application.

Special Use Precautions:

To avoid possible injury, do not apply XL 2G to:

- Cool season turfgrass species other than tall fescue.
- Lawns containing dichondra or cool season turfgrass species.
- Golf course putting greens or tees.
- Turfgrass in the spring that was planted the previous fall.
- Newly sprigged or sodded areas of bermudagrass, St. Augustinegrass, centipedegrass, zoysiagrass or tall fescue
 until these turfs are well established and have well anchored root systems.
- Newly hydromulched areas of bermudagrass until such areas are well established.

This product must be watered in as soon as possible after application to dissolve the granules. A single rainfall or irrigation of ½ inch or more is required after product application. Watering-in must be performed by the commercial applicator or the commercial applicator must provide the following information to the resident or owner in writing:

- "This product must be watered in as soon as possible".
- "Do not enter or allow others (including children or pets) to enter the treated areas (except those involved in the watering) until the watering-in is complete and the surface is dry."

Restrictions:

- Maximum of 3 lbs a.i. per acre per application
- Maximum of 3 applications per year
- Maximum of 6 lbs. a.i. benefin per acre per year

XL 2G will not control emerged weeds.

XL 2G may injure turf that is not well established or is stressed or weakened due to unfavorable winter climatic conditions, drought, nematodes, or other factors which damage or weaken turf root systems. Apply **XL 2G** only to healthy, well-established turf that has a well-anchored root system.

Do not apply **XL 2G** in the spring or early summer to tall fescue turfgrass reseeded the previous fall. In such cases, apply Balan* 2.5G granular herbicide at 60 to 80 pounds per acre in early summer (Round 1) and **XL 2G** at 100 pounds per acre approximately eight weeks later (Round 2).

XL 2G may thin established annual bluegrass (Poa annua) at rates above 100 pounds per acre.

In bermudagrass areas that have been overseeded with winter grasses, a spring application of **XL 2G** will thin the overseeded grasses.

Weeds Controlled or Suppressed by XL 2G

Weeds controlled by XL 2G when applied at 100 to 150 lb/acre (2.3 to 3.4 lb/1000 sq ft)

Annual Grasses

Summer Annuals:		Winter Annuals:		
Common Name	Scientific Name	Common Name	Scientific Name	
barnyardgrass crabgrass crowfootgrass foxtail goosegrass johnsongrass (seedling only) ryegrass, Italian sandbur, field	Echinochloa crus-galli Digitaria spp. Dactyloctenium aegyptium Setaria spp. Eleusine indica Sorghum halepense Lolium multiflorum Cenchrus incertus	bluegrass, annual	Poa annua	

Broadleaf Weeds

Summer Annuals:		Winter Annuals:		
Common Name	Scientific Name	Common Name	Scientific Name	
knotweed, prostrate	Mollugo verticillata Polygonum aviculare Portulaca oleracea	chickweed, common henbit	Stellaria media Lamium amplexicaule	

In addition to the weeds controlled, the following weeds will be partially controlled or suppressed at 100 to 150 lb/acre (2.3 to 3.4 lb/1000 sq ft).

C	O	m	m	on	Na	me
---	---	---	---	----	----	----

carrot, wild fleabane, dwarf groundsel, common mustard, Indian spurge, prostrate woodsorrel, yellow

Scientific Name

Daucus carota Conyza ramosissima Senecio vulgaris Brassica juncea Euphorbia humistrata

Oxalis stricta

Application Rates, Frequency and Timing of Applications

XL 2G can be applied in the spring for summer annual grass and broadleaf weed control, and in the fall for annual bluegrass (Poa annua) and winter annual broadleaf weed control.

Broadcast Application Rates (Warm Season Turfgrasses)

	XL 2G		Minimum Time Between Applications	Total Amount Allowed Per Year (lb/acre)	
Use Area	(lb/acre)	(lb/1000 sq ft)	(months)		
All regions	100	2.3	. 2	200	
	150	3.4	3	300	

1. Summer Annual Grasses and Broadleaf Weeds

Single Application Program: Apply 150 pounds per acre of **XL 2G** in late winter or early spring, prior to the onset of conditions favorable for summer annual weed germination.

Split Application Program: As an alternative to a single application program, **XL 2G** may be applied in a split application. This program is desirable when the initial application is made well in advance of weed germination and where weed control is desired for a longer period of time. Apply 100 pounds per acre of **XL 2G** in an initial application, followed by a second application of 100 pounds per acre 8 to 10 weeks later.

The second treatment of the split application may follow application of a different preemergence grass herbicide in place of the initial **XL 2G** application.

2. Annual Bluegrass and Winter Annual Broadleaf Weeds

Apply XL 2G as a preemergence treatment in late summer or early fall, prior to the expected germination period for annual bluegrass and winter annual broadleaf weeds. Do not apply XL 2G to areas where fall overseeding will occur. If annual bluegrass infestation is severe and its elimination will result in thinning of turfgrass cover, apply XL 2G at 100 pounds per acre. If thinning of turfgrass cover is not a potential problem, XL 2G may be applied at 150 pounds per acre.

In areas of heavy annual bluegrass infestation, its elimination will result in temporary thinning of turfgrass cover. Proper fertilization, irrigation and soil incorporated reseeding should be employed to speed the restoration of desirable turfgrass cover in areas previously occupied by annual bluegrass (See section on reseeding).

Application Directions

Apply **XL 2G** evenly over the turfgrass area. Avoid spray pattern skips and overlaps that may result in incomplete coverage or over-application. For best results use application equipment designed to uniformly broadcast granular herbicides. More uniform application may be achieved by spreading half the required amount of product over the area and then applying the remaining half in swaths at right angles to the first application. Calibrate application equipment prior to use, according to manufacturer's directions. Check equipment frequently to make sure it is working properly and distributing granules uniformly.

Reseeding

Herbicides that control annual weeds may also affect establishment of desirable turfgrass seedlings. Reseeding must be delayed for at least 6 weeks following application of **XL 2G** at the 100 pound per acre rate. When using **XL 2G** at the 150 pound per acre rate, reseeding must be delayed 12 to 16 weeks after application. When reseeding, it is essential that proper cultural practices such as soil cultivation and seedbed preparation, irrigation and fertilization be followed. For satisfactory reseeding results following **XL 2G** use, the seeding rate must be increased and equipment designed to place seed in full contact with soil (such as the Rogers Aero Seeder) should be employed.

Spreader Settings

(A guide for calibrating spreaders to apply XL 2G in one pass over turf.)

Note: These settings are provided as suggested starting points in calibrating each individual spreader. Since no two spreaders are alike, these settings are intended only as a guide in beginning the calibration process.

	Estimated Spreader Setting Necessary to Apply the Speci Rate of XL 2G Per Acre In One Pass		
Spreader Type	100 lb/acre	150 lb/acre	
Cyclone: Models B1, 33, 96, BSSB at 200 ft/min. Model 100 at 200 ft/min.	3 1/4 3 1/4	3 1/2 3 1/2	
Model 93 (based on tractor speed of 4 mph) Model 99 (based on tractor speed of 4	5	6 1/4	
mph) Model BPI (based on tractor speed of 4	4 3/4	5 3/4-6	
mph)	4 1/2	5 1/4-5 1/2	
Gandy: Model 10A series, 6, 8, 10, 11, 12, 20 and 30 ft (based on tractor speed of 5 mph) Model 10T series, 6, 8, 10, 11, 12, 20 and 30 ft (based on tractor speed of	31	37	
5 mph) Turf Tender, 24, 30, 42 inch (based on	33	, <i>40</i>	
tractor speed of 3 mph) 600 Series, 2, 4 and 5 ft (based on	25	28	
tractor speed of 3 mph)	18	22	
Lely: Model W and H (based on tractor speed of 4.5 mph)	3	4	
Lesco: Lesco Spreader (Note: set 3rd adjustable hole 1 notch from "open")	D 1/2	F.	
Scott: Rotary Model R-8 Drop Spreader	H 1/2 3 7/8	l 1/4 4 5/8	
Spyker: Spyker	3.2	3.6	
Vicon: Model 402 (with seed ring) swath width 20 ft, 5 mph speed	24	28	
Warren: Model T-7II (based on ground speed of 3.0 mph)	3 1/4	. 4	

CONDITIONS OF SALE - LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES

Read the Conditions of Sale - Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return the product, unopened, and the full purchase price will be refunded.

The Directions for Use of this product must be followed carefully. The Directions for Use of this product reflect the opinion of experts based on field use and tests. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Helena Chemical Company or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of Helena Chemical Company and Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Helena Chemical Company and Seller harmless for any claims relating to such factor Helena Chemical Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Helena Chemical Company and Buyer and User assume the risk of any such use. HELENA CHEMICAL COMPANY MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, Helena Chemical Company or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF HELENA CHEMICAL COMPANY AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF HELENA CHEMICAL COMPANY OR SELLER, THE REPLACEMENT OF THE PRODUCT.

Helena Chemical Company and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by the duly authorized representative of Helena Chemical Company.

© Copyright Helena Holding Company, 2012.