

Helena**XL* 2G****Specialty Herbicide**

Contains oryzalin, the active ingredient in Surflan* herbicides. A selective preemergence herbicide for control of certain annual grasses and 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
- Christmas tree plantations
- Non-cropland
- Established tall fescue and warm season turf (including bahiagrass, bermudagrass)
- Buffalograss, centipedegrass
- St. Augustinegrass, and zoysiagrass

ACTIVE INGREDIENTS:

benefin: <i>N</i> -butyl- <i>N</i> -ethyl- α,α,α -trifluoro 2,6-dinitro- <i>p</i> -toluidine	1.0%
oryzalin: 3,5-dinitro- <i>N,N</i> -dipropylsulfanilamide	1.0%
INERT INGREDIENTS	98.0%

Contains 1 pound active ingredient per 50 pound bag

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PRECAUTIONARY STATEMENTS**Hazards To Humans And Domestic Animals****KEEP OUT OF REACH OF CHILDREN****CAUTION**

Causes Eye Irritation • Harmful if Swallowed, Inhaled, Or Absorbed Through The Skin

Avoid breathing dust and contact with skin, eyes, or clothing.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks
- Protective Eyewear

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, 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.

First Aid

If swallowed: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

If on skin: Wash with plenty of soap and water. Get medical attention if irritation develops.

If in eyes: Flush eyes with plenty of water. Get medical attention if irritation develops.

If inhaled: If discomfort occurs, remove individual to fresh air. Get medical attention if breathing difficulty occurs. If not breathing, provide cardiopulmonary resuscitation assistance (mouth-to-mouth) and call a physician.

Environmental Hazards

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.

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 (REI) of 12 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
- Waterproof gloves
- Shoes plus socks
- Protective Eyewear

STORAGE AND DISPOSAL

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

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: Completely empty bag into application equipment. Then 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.

GENERAL 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 flowers, ornamental bulbs, non-bearing fruit trees and nut trees and non-bearing vineyards, Christmas tree plantations, noncropland 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. Repeat applications at 200 pounds per acre and higher should not be made sooner than 90 days after a previous application of **XL 2G**. Do not apply over 900 pounds per acre total of **XL 2G** within a 12 month period.

General Use Precautions

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. 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 recommended on this label may determine the suitability for such uses by treating a small number of such plants at a recommended 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 noninjurious 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 recommended 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 splash board 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, Landscape Ornamentals, Nursery Stock, Ground Covers, Flowers, Ornamental Bulbs, Non-bearing Fruit and Nut Trees and Non-bearing Vineyards, Christmas Tree Plantations, and Non-cropland

XL 2G is recommended as a preemergence treatment for control of certain annual grasses and 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, Christmas tree plantations, and non-cropland. Apply **XL 2G** prior to germination of target weeds or immediately after cultivation.

Note: Refer to the “General Information” section of this label for general 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.
- 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)
Thuja occidentalis ‘Techny’ (Techny arborvitae)
Tsuga canadensis (eastern hemlock)
- **Ice Plant:** When establishing unrooted ice plant (*Mesembryanthemum crystallinum* and *Carpobrotus 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.

Repeat applications should not be made sooner than 60 days after a previous application of **XL 2G**. Do not apply over 900 pounds per acre total of **XL 2G** within a 12 month period.

Unlisted plant species: Users who wish to use **XL 2G** on plants species not recommended on this label may determine the suitability for such uses by treating a small number of such plants at a recommended 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 noninjurious 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 recommended 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:

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

Broadleaf Weeds:

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

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).

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

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

Trees

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

Scientific Name/Common Name	Recommended Treatment Method: C = Container Grown F = Field Grown
<i>Chamaecyparis lawsoniana</i>	
Lawson falsecypress	F
<i>Chamaecyparis obtusa</i> spp.	
Filicoides-fernspray cypress	F
Gracilis-slender Hinoki cypress	F
<i>Chamaecyparis pisifera</i>	
Sawara-false cypress	F
Squarrosa-moss cypress	F
<i>Chamaedorea cataractarum</i>	
Cat palm	F
<i>Chamaedorea costaricana</i>	
Palm	F
<i>Chamaedorea elegans</i>	
Parlor palm	F
<i>Cornus florida</i>	
Flowering dogwood	F
<i>Crupaniopsis anacardioides</i>	
Carrot wood	F
<i>Cryptomeria japonica</i>	
Japanese cryptomeria	C, F
<i>Cupressus glabra</i>	
Arizona cypress	C, F
<i>Cupressus sempervirens</i>	
Italian cypress	C, F
<i>Elaeagnus angustifolia</i>	
Russian olive	C, F
<i>Eucalyptus cinerea</i>	
Mealy eucalyptus	F
Silver dollar eucalyptus	F
<i>Eucalyptus camaldulensis</i>	
Red gum eucalyptus	F
<i>Eucalyptus nicholii</i>	
Narrow-leaved eucalyptus	F
<i>Eucalyptus sideroxylon</i>	
Red ironbark eucalyptus	F
<i>Ficus benjamina</i>	
Ficus	F
<i>Fraxinus</i> spp.	
Ash	F
<i>Ginkgo biloba</i>	
Maidenhair tree	C, F
<i>Gleditsia triacanthos</i>	
Honey locust	F
<i>Heteromeles arbutiflora</i>	
Toyon	F
<i>Juniperus virginiana</i>	
Eastern redcedar	F
<i>Kalmia latifolia</i>	
Mountain laurel	F
<i>Koelreuteria paniculata</i>	
goldenrain tree	F
<i>Liquidambar styraciflua</i>	
American sweet gum	C, F
<i>Magnolia grandiflora</i>	
Southern magnolia	F
<i>Malus</i> spp.	
Crabapple	F
<i>Morus alba</i>	
White mulberry	F
<i>Olea europaea</i>	
Olive	F
<i>Picea abies</i>	
Norway spruce	F
<i>Picea englemanni</i>	
Englemann spruce	F
<i>Picea glauca</i>	
Conica-dwarf Alberta spruce	F
White spruce	F
<i>Picea mariana</i>	
Black spruce	F
<i>Picea pungens</i> spp.	
Glauca-Colorado blue spruce	F
Hoopsii-Hoop's blue spruce	F
Koster-Koster blue spruce	F
<i>Pinus</i> spp.	
Pine	C, F
<i>Platanus occidentalis</i>	
American sycamore	F
<i>Platanus racemosa</i>	
California sycamore	F
<i>Podocarpus</i> spp.	
Podocarpus	F
<i>Populus deltoides</i>	
Cottonwood	F

Scientific Name/Common Name	Recommended Treatment Method: C = Container Grown F = Field Grown
<i>Prunus caroliniana</i>	
Carolina laurelcherry	F
<i>Prunus laurocerasus</i>	
English laurelcherry	F
<i>Prunus mahaleb</i>	
Mahaleb cherry	F
<i>Prunus yedoensis</i>	
Yoshino flowering cherry	F
<i>Quercus</i> spp.	
Oak	C, F
<i>Salix babylonica</i>	
Babylon weeping willow	F
Corkscrew willow	F
<i>Schinus molle</i>	
California pepper tree	F
<i>Sequoiadendron giganteum</i>	
Giant sequoia	F
<i>Sequoia sempervirens</i>	
Coast redwood	F
<i>Swietenia mahogany</i>	
Mahogany	F
<i>Tabebuia caraiba</i>	
Yellow tab	F
<i>Tilia cordata</i>	
Littleleaf linden	C, F
<i>Thuja plicata</i>	
Western redcedar	F
<i>Ulmus parvifolia</i>	
Chinese Elm	F
<i>Umbellularia californica</i>	
California laurel	F
<i>Washingtonia robusta</i>	
Mexican fan palm	F

Ornamental Shrubs

Scientific Name/Common Name	Recommended Treatment Method: C = Container Grown F = Field Grown
<i>Abelia grandiflora</i>	
Glossy abelia	F
<i>Acacia redolens</i>	
Prostrate acacia	F
<i>Agave americana</i>	
Century plant	F
<i>Agave macroculmis</i>	
Agave	F
<i>Arctostaphylos stanfordiana</i>	
Stanford manzanita	F
<i>Astilbe chinensis</i>	
False spirea	C, F
<i>Baccharis pilularis</i>	
Coyotebush	F
<i>Berberis thunbergii</i>	
Atropurea-Redleaf Japanese barberry	C, F
Aurea golden Japanese barberry	C, F
Crimson pygmy barberry	C, F
<i>Bougainvillea</i> spp.	
Barbara Karst	F
California Gold	F
Scarlet O'Hara	F
Texas Dawn	F
<i>Buxus microphylla</i>	
Japonica-Japanese boxwood	C, F
Littleleaf boxwood	F
<i>Buxus sempervirens</i>	
Common boxwood	C, F
<i>Callistemon citrinus</i>	
Lemon bottlebrush	C, F
<i>Ceanothus</i> spp.	
Wild lilac	C, F
<i>Chamaecyparis obtusa</i> spp.	
Kosteri cypress	F
Nana-dwarf Hinoki cypress	F
Torulosa cypress	F
<i>Chamaecyparis pisifera</i>	
Filifera-thread cypress	F
Squarrosa minima-dwarf moss cypress	F
<i>Chrysalidocarpus lutescens</i>	
Areca palm	F
<i>Cleyera japonica</i>	
Japanese cleyera	C, F

Scientific Name/Common Name	Recommended Treatment Method: C = Container Grown F = Field Grown	Scientific Name/Common Name	Recommended Treatment Method: C = Container Grown F = Field Grown
<i>Cotoneaster adpressus</i>		Nordica-inkberry holly	F
Praecox-early cotoneaster	F	<i>Ilex meserveae</i>	
<i>Cotoneaster apiculatus</i>		Blue girl holly	F
Cranberry cotoneaster	C, F	Blue boy holly	F
<i>Cotoneaster buxifolius</i>		Ebony magic holly	F
Brightbead cotoneaster	F	<i>Ilex vomitoria</i>	
<i>Cotoneaster congestus</i>		Nana-dwarf yaupon holly	C, F
Pyrenees cotoneaster	F	Pendula-weeping yaupon holly	C, F
<i>Cotoneaster dammeri</i>		Yaupon holly	C, F
Bearberry cotoneaster	C, F	<i>Juniperus spp.</i>	
<i>Cotoneaster himalayana</i>		Juniper	C, F
Himalayan cotoneaster	F	<i>Justicia brandegeana</i>	
<i>Cotoneaster horizontalis</i>		Shrimp plant	C, F
Rock cotoneaster	C, F	<i>Justicia spicigera</i>	
<i>Cotoneaster lacteus</i>		Mexican honeysuckle	F
Parney cotoneaster	C, F	<i>Lagerstroemia indica</i>	
<i>Cotoneaster microphyllus</i>		Crape myrtle	C, F
Rockspray cotoneaster	F	<i>Leucothoe axillaris</i>	
<i>Cornus alba</i>		Coast leucothoe	F
Sibirica-Siberian dogwood	F	<i>Leucothoe fontanesiana</i>	
<i>Cornus florida</i>		Drooping leucothoe	F
Flowering dogwood	F	<i>Ligustrum amurense</i>	
<i>Cornus kousa</i>		Amur privet	C, F
Kousa dogwood	C, F	<i>Ligustrum japonicum</i>	
<i>Cornus stolonifera</i>		Japanese privet	C, F
Flaviramea-yellowtwig dogwood	F	Yellow tip ligustrum	C, F
<i>Cryptomeria japonica</i>		<i>Ligustrum texanum</i>	
Japanese cryptomeria	C, F	Wax leaf privet	F
<i>Cytisus praecox</i>		Howardi privet	F
Holandia-warminster broom	F	<i>Ligustrum lucidum</i>	
<i>Cytisus scoparius</i>		Glossy privet	C, F
Lena-Scotch broom	F	<i>Ligustrum ovalifolium</i>	
<i>Dasyliirion wheeleri</i>		California privet	F
Desert spoon soto	F	<i>Ligustrum vicaryi</i>	
<i>Deutzia crenata</i>		Vicary golden privet	C, F
Nakiana dwarf deutzia	F	<i>Livistona chinensis</i>	
<i>Dodonea viscosa</i>		Chinese fountain palm	F
Hopseed bush	F	<i>Lonicera fragrantissima</i>	
<i>Escallonia exoniensis</i>		Winter honeysuckle	F
Escallonia	C, F	<i>Lonicera periclymenum</i>	
<i>Euonymus alata</i>		Flowering woodbine	F
Winged euonymus	F	Serotina woodbine	F
<i>Euonymus fortunei</i>		<i>Lonicera sempervirens</i>	
Canadale gold euonymus	C, F	Trumpet honeysuckle	F
Emerald'n gold euonymus	C, F	<i>Mahonia aquifolium</i>	
Stringybark euonymus	C, F	Oregon grape	F
Wintercreeper	C, F	<i>Myoporum parvifolium</i>	
<i>Euonymus japonica</i>		Prostrate myoporum	F
Evergreen euonymus	C, F	<i>Myrtus communis</i>	
Silver king euonymus	F	True myrtle	C, F
<i>Euonymus kiautschovica</i>		<i>Nandina domestica</i>	
Spreading euonymus	F	Compacta-dwarf heavenly bamboo	C, F
<i>Fatsyhedera lizei</i>		Harbour-dwarf heavenly bamboo	C, F
Fatsyhedera	C, F	Heavenly bamboo	C, F
<i>Forsythia infermedia</i>		Nana compacta-heavenly bamboo	C, F
Forsythia	F	Nana purpurea-heavenly bamboo	C, F
<i>Gardenia jasminoides</i>		Woods-dwarf heavenly bamboo	C, F
Gardenia	C, F	<i>Nerium oleander</i>	
<i>Gemista pilosa</i>		Hardy red oleander	C, F
Woadwaxen	F	Oleander	C, F
<i>Hibiscus rosa-sinensis</i>		Ruby lace oleander	C, F
Chinese hibiscus	F	<i>Osmanthus heterophyllus</i>	
Ross Estey hibiscus	F	Holly-leaf osmanthus	F
<i>Hibiscus syriacus</i>		<i>Pachysandra terminalis</i>	
Rose of Sharon, Red Bird	F	Japanese spurge	F
Rose of Sharon, Red Heart	F	<i>Philadelphus spp.</i>	
Rose of Sharon, Woodbridge	F	Mockorange	C, F
<i>Hypericum spp.</i>		<i>Phoenix roebelenii</i>	
St. Johnswort	F	Pygmy date palm	F
<i>Ilex aquifolium</i>		<i>Photinia fraseri</i>	
Balkans holly	F	Fraser's photinia	C, F
English holly	F	<i>Picea abies</i>	
Gold coast holly	F	Repens-spreading Norway spruce	F
<i>Ilex aquipernyi</i>		Pendula-weeping Norway spruce	F
San Jose holly	C, F	<i>Pieris japonica</i>	
<i>Ilex comuta</i>		Andromeda	C, F
Chinese holly	C, F	Lily-of-the-valley	F
Dwarf burford holly	C, F	Snowdrift	F
<i>Ilex crenata</i>		Temple bells lily-of-the-valley	F
Convexa holly	C, F	Valley rose lily-of-the-valley	F
Compacta-dwarf Japanese holly	C, F	<i>Pittosporum spp.</i>	
Helleri-Heller's Japanese holly	C, F	Pittosporum	C, F
Japanese holly	C, F	<i>Platyclusus orientalis</i>	
<i>Ilex glabra</i>		Oriental arborvitae	C, F

Scientific Name/Common Name	Recommended Treatment Method: C = Container Grown F = Field Grown
<i>Plumbago ariculata</i>	
Blue cape plumbago	F
<i>Podocarpus macrophyllus</i>	
Yewpine	C, F
<i>Potentilla fragiformis</i>	
Cinquefoil	F
<i>Potentilla fruticosa</i>	
Cinquefoil	C, F
<i>Protea nerifolia</i>	
Protea	F
<i>Pyracantha coccinea</i>	
Scarlet forethorn	C, F
<i>Pyracantha fortuneana</i>	
Lalendel Monrovia pyracantha	C, F
Monon pyracantha	C, F
Red elf hybrid pyracantha	C, F
Rutgers hybrid pyracantha	C, F
Santa Cruz pyracantha	C, F
Victory pyracantha	C, F
<i>Pyracantha skoidzumi</i>	
Formosa firethorn	C, F
<i>Rhaphiolepis indica</i>	
Enchantress-Moness rhaphiolepis	F
India hawthorn	C, F
Springtime-Monme rhaphiolepis	F
<i>Rhaphiolepis ovata</i>	
Round-leaf rhaphiolepis	F
<i>Rhipsalidopsis gaetneri</i>	
Easter cactus	C, F
<i>Rhododendron spp.</i>	
Azalea	C, F
Rhododendron	C, F
<i>Rhus lancea</i>	
African sumac	C, F
<i>Rosa rugosa</i>	
Ramanas rose	F
<i>Rosmarinus officinalis</i>	
Rosemary	F
<i>Spiraea vanhouttei</i>	
Bridal wreath	F
<i>Syringa vulgaris</i>	
Common lilac	F
<i>Syzygium paniculata</i>	
Brush cherry	C, F
<i>Taxus cuspidata</i>	
Japanese yew	F
<i>Taxus media</i>	
Yew	F
<i>Thuja occidentalis</i>	
American arborvitae	F
Emerald arborvitae	F
Globosa-globe arborvitae	F
Little Giant-dwarf arborvitae	F
Nigra-dark American arborvitae	F
Pyramidalis arborvitae	F
Rheingold arborvitae	F
Woodwardii arborvitae	F
<i>Thuja orientalis</i>	
Aurea nana-dwarf golden arborvitae	F
Minima glauca-dwarf arborvitae	F
<i>Trachelospermum jasminoides</i>	
Chinese star jasmine	F
<i>Veitchia merilli</i>	
Christmas palm	F
<i>Viburnum davidii</i>	
David viburnum	F
<i>Viburnum japonicum</i>	
Viburnum	F
<i>Viburnum opulus sterile</i>	
Eastern snowball viburnum	F
<i>Viburnum plicatum tomentosum</i>	
Doublefile viburnum	F
<i>Viburnum x pragense</i>	
Viburnum	F
<i>Viburnum setigerum</i>	
Tea viburnum	F
<i>Viburnum suspensum</i>	
Sandankwa viburnum	F
<i>Viburnum tinus</i>	
Compactum-spring bouquet viburnum	F
Laurastinus viburnum	C, F
<i>Viburnum trilobum</i>	
Compactum-dwarf cranberry bush	F
<i>Weigela florida</i>	

Scientific Name/Common Name	Recommended Treatment Method: C = Container Grown F = Field Grown
Java red weigela	F
Bristol ruby weigela	F
Minuet weigela	F
<i>Xylosma congestum</i>	
Xylosma	F
<i>Yucca elata</i>	
Soaptree yucca	C, F
<i>Yucca recurvifolia</i>	
Pendulous yucca	F

Ground Covers

Scientific Name/Common Name	Recommended Treatment Method: C = Container Grown F = Field Grown
<i>Agapanthus africanus</i>	
Lily-of-the-Nile	C, F
<i>Ajuga spp.</i>	
Carpet bugle	F
<i>Arctotheca calendula</i>	
Cape weed	F
<i>Campanula elatines</i>	
Bellflower	C, F
<i>Carpobrotus edulis</i>	
Largeleaf iceplant	F
<i>Clytostoma callistegioides</i>	
Violet trumpet vine	C, F
<i>Cortaderia selloana</i>	
Pampas grass	F
<i>Delosperma alba</i>	
White iceplant	F
<i>Drosanthemum floribundum</i>	
Trailing rosea iceplant	F
<i>Festuca ovina</i>	
Blue fescue	F
<i>Gazania spp.</i>	
Gazania	F
<i>Hedera canariensis</i>	
Algerian ivy	F
<i>Hedera helix</i>	
English ivy	F
<i>Hemerocallis spp.</i>	
Day lily	C, F
<i>Hosta spp.</i>	
Plantain lily	C, F
<i>Hypericum spp.</i>	
St. Johnswort	F
<i>Lampranthus spectabilis</i>	
Red trailing iceplant	F
<i>Liriope gigantea</i>	
White lily turf	F
<i>Liriope muscari</i>	
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
<i>Lonicera japonica</i>	
Japanese honeysuckle	F
<i>Mesembryanthemum crystallinum</i>	
Ice plant	F
<i>Ophiopogon japonicus</i>	
Mondo grass	F
<i>Osteospermum fruticosum</i>	
Trailing African daisy	F
<i>Sedum brevifolium</i>	
Stoncrop	F
<i>Trachelospermum jasminoides</i>	
Chinese star jasmine	F
<i>Vinca major</i>	
Bigleaf periwinkle	F
<i>Vinca minor</i>	
Dwarf periwinkle	F

Established Flowers

Scientific Name/Common Name	Recommended Treatment Method: C = Container Grown F = Field Grown
<i>Achillea spp.</i>	

Scientific Name/Common Name	Recommended Treatment Method: C = Container Grown F = Field Grown
Yarrow	F
<i>Antirrhinum majus</i> Snapdragon	F
<i>Caladium bicolor</i> Fancy-leaved caladium	F
<i>Chrysanthemum coccineum</i> Painted daisy	F
<i>Chrysanthemum maximum</i> Shasta daisy	F
<i>Chrysanthemum morifolium</i> Chrysanthemum	F
<i>Coreopsis lanceolata</i> Coreopsis	F
<i>Dianthus barbatus</i> Sweet william	F
<i>Dicentra spectabilis</i> Bleeding heart	C, F
<i>Dimorphotheca spp.</i> Cape marigold	F
<i>Echinacea purpurea</i> Purple coneflower	F
<i>Geum quellyon</i> Geum	F
<i>Gladiolus hortulanus</i> Gladiolus	F
<i>Gypsophila paniculata</i> Baby's breath	F
<i>Impatiens wallerana</i> Impatiens	F
<i>Iris spp.</i> Bearded iris	F
<i>Liatris spicata</i> Blazing star	C, F
<i>Pelargonium hortorum</i> Geranium	F
<i>Petunia spp.</i> Petunia	F
<i>Portulaca grandiflora</i> Rose moss	F
<i>Ranunculus asiaticus</i> Persian ranunculus	F
<i>Rosa spp.</i> Rose	F
<i>Rudbeckia hirta</i> Gloriosa daisy/black-eyed susan	F
<i>Salvia spp.</i> Sage	F
<i>Stokesia laevis</i> Stokes aster	F
<i>Strelitzia reginae</i> Bird of paradise	F
<i>Tagetes spp.</i> Marigold	F
<i>Viola wittrockiana</i> Pansy	F
<i>Zinnia elegans</i> Common zinnia	F

Ornamental Bulbs**Special Use Precautions**

Do not apply to tulip plants that have emerged to a height greater than $\frac{3}{4}$ 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 Application	Soil Texture	XL 2G	
		pounds/acre	pounds/1000 sq ft
Fall	Coarse	75	1.7
Fall	Medium and Fine	150	3.4
Feb.-March	All	75	1.7

Non-bearing Fruit and Nut Trees and Non-bearing Vineyards*

Scientific Name/Common Name	Recommended Treatment Method: C = Container Grown F = Field Grown
Almond	F
Apple	F
Apricot	F
Avocado	F
Blackberry	F
Blueberry	F
Boysenberry	F
Cherry, Sour	F
Cherry, sweet	F
Currant	F
Dewberry	F
Elderberry	F
Fig	F
Filbert	F
Gooseberry	F
Grape, American	F
Grape, European	F
Grapefruit	F
Kiwi	F
Kumquat	C, F
Lemon	F
Loganberry	F
Macadamia nut	F
Nectarine	F
Olive	F
Orange	C, F
Peach	F
Pear	F
Pecan	C, F
Pistachio	F
Plum	F
Pomegranate	F
Prune	F
Raspberry	F
Walnut, black	F
Walnut, English	F

*Non-bearing fruit and nut trees and nonbearing vineyards are defined as plants which will not bear fruit for at least one year after treatment.

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.

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

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

XL 2G is recommended 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.

Note: Refer to the "General Information" section of this label for general use precautions and information on application. Refer to "Approved Uses" section of this label for special use precautions and information on application rates and 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 ($\frac{1}{2}$) 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.

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.

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Weeds Controlled or Suppressed by XL 2G

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

Annual Grasses

Summer Annuals:

Common Name

barnyardgrass
crabgrass
crowfootgrass
foxtail
goosegrass
johnsongrass
(seedling only)
ryegrass, italian
sandbur, field

Scientific Name

Echinochloa crus-galli
Digitaria spp.
Dactyloctenium aegyptium
Setaria spp.
Eleusine indica
Sorghum halepense

Lolium multiflorum
Cenchrus incertus

Winter Annuals:

Common Name

bluegrass, annual

Scientific Name

Poa annua

Broadleaf Weeds

Summer Annuals:

Common Name

carpetweed
knotweed, prostrate
purslane, common

Scientific Name

Mollugo verticillata
Polygonum aviculare
Portulaca oleracea

Winter Annuals:

Common Name

chickweed, common
henbit

Scientific Name

Stellaria media
Lamium amplexicaule

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

Common Name

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.

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 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 reseeded should be employed to speed the restoration of desirable turfgrass cover in areas previously occupied by annual bluegrass. (See section on reseeded.)

Weed Control In Florida

In Florida, apply 150 pounds per acre of **XL 2G** three times per year, or every 90 to 100 days, in the fall, early spring and early summer. Do not apply more than 150 pounds per acre of **XL 2G** in any single application.

Broadcast Application Rates

XL 2G	
Pounds per acre	Pounds per 1000 sq ft
100	2.3
150	3.4

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 adding 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 should 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, reseeded should be delayed 12 to 16 weeks after application. When reseeded, it is essential that proper cultural practices such as soil cultivation and seedbed preparation, irrigation and fertilization be followed. For satisfactory reseeded results following **XL 2G** use, the seeding rate should 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.

Spreader Type	Estimated Spreader Setting Necessary to Apply the Specified Rate of XL 2G Per Acre In One Pass	
	100 lbs/acre	150 lbs/acre
Cyclone: Models B1, 33, 96, BSSB at 200 ft/min. Model 100 at 200 ft/min. Model 93 (based on tractor speed of 4 mph) Model 99 (based on tractor speed of 4 mph) Model BPI (based on tractor speed of 4 mph)	3 ¼ 3 ½ 5 4 ¾ 4 ½	3 ½ 3 ½ 6 ¼ 5 ¾-6 5 ¼-5 ½
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 5 mph) Turf Tender, 24, 30, 42 inch (based on tractor speed of 3 mph) 600 Series, 2, 4 and 5 ft (based on tractor speed of 3 mph)	31 33 25 18	37 40 28 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 ½	F
Scott: Rotary Model R-8 Drop Spreader	H ½ 3 ⅞	I ¼ 4 ⅞
Spyker: Spyker	3.2	3.6
Vicon:		

Spreader Type	Estimated Spreader Setting Necessary to Apply the Specified Rate of XL 2G Per Acre In One Pass	
	100 lbs/acre	150 lbs/acre
Model 402 (with seed ring) swath width 20 ft., 5 mph speed	24	28
Warren: Model T-711 (based on ground speed of 3.0 mph)	3 ¼	4

**CONDITIONS OF SALE—LIMITED WARRANTY
AND LIMITATIONS OF LIABILITY AND REMEDIES**

The directions on this label are believed to be reliable and should be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions, the failure to follow the label directions, or good application practices, all of which are beyond the control of Setre Chemical Company (the Company) or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the factors noted above which are beyond the control of the Company. The Company makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

The exclusive remedy against the Company for any cause of action relating to the handling or use of this product is a claim for damage and in no event shall damages or any other recovery of any kind against the Company exceed the price of the product which causes the alleged loss, damage, injury, or other claim. The Company shall not be liable and any and all claims against the Company are waived for special, indirect, incidental or consequential damages or expenses of any nature, including, but not limited to, loss of profits or income.

The Company and the seller offer this product and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.