

**ELANCO** ID 5951

Herbicide  
**Spike**®  
1 G

A preemergence and postemergence herbicide for total control of vegetation in such areas as:



- Airport runways
- Utility substations and rights-of-way
- Tank farms
- Railway roadbeds and ballast
- Railroad rights-of-way
- Road shoulders where no vegetation is desired
- Under asphalt and concrete pavements where no future landscaping is planned
- At the base of highway guardrails, signposts and markers
- At the base of transmission towers and poles
- Around industrial buildings
- Lumberyards
- Railroad yards
- Ditchbanks
- Fencebreaks
- Fence rows

ACCEPTED  
OCT 2 1970  
EPA Reg. No. 1471-104

The degree and duration of control may vary with the amount of chemical applied, soil texture and other conditions

Active ingredient  
 tebuthiuron, N-[5-(1,1-dimethylethyl)-1,3,4-thiazol-2-yl]-N,N-dimethylurea ..... 1%  
 Inert ingredients ..... 99%

Contains 0.5 pound active ingredient per 50 pound bag

SPIKE is the registered trademark for Elanco Products tebuthiuron

**CAUTION:** KEEP OUT OF REACH OF CHILDREN See back panel for additional caution statements

**Net Weight 50 Pounds**

EPA Reg. No. 1471-104

BG 3483 AMB

## Directions for Use Read All Directions Carefully Before Applying

SPIKE 1G is a nonselective herbicide for controlling a wide range of annual and perennial weeds and grasses and woody plants. It is recommended only for noncropland areas such as airport runways, utility substations and rights-of-way, tank farms, railway roadbeds and ditches, railroad rights-of-way, road shoulders where no vegetation is desired, under asphalt and concrete pavements, at the base of highway guardrails, signposts and markers, at the base of transmission towers and poles, around industrial buildings, lumberyards, railroad yards, ditchbanks, fire-breaks, and fence rows, for the control of most annual and perennial grasses and broadleaved weeds. Effects are slow to appear and will not become apparent until the chemical has been carried into the root zone of the weeds by moisture. Control will last for an extended period. The effectiveness and length of time control will last depend on type of soil, amount of rain, and other conditions.

### How to Apply

Use a mechanical spreader or other device which will spread the required amount evenly over the area to be treated. It may be applied when top growth is dense but better control will be obtained when weeds are short or when excess growth is mowed and removed before applying.

### When to Apply

Best results will be obtained if applied shortly before or at the time plant growth begins. Rains or thorough watering after application will cause the material to move to the root zone and thus speed up control. Do not use when ground is frozen.

### General Weed Control

Uniformly apply 400 pounds per acre to control the following weeds:

Ajuga	Chickweed	Hemlock, poison	Raspberry, red
Aster, heath	Clover, red	Herd	Ryegrass, Italian
Aster, white heath	Cocklebur	Honeysuckle, Japanese	Sedge, annual
Barley, little	Creeper, Virginia	Horseweed	Shepherdspurse
Bodysue	Crownfootgrass	Knapsack	Sida, prickly
Bluegrass, annual	Dock, curly	Kochia	Southwest, annual
Bluegrass, Kentucky	Dogfennel	Lambquarters	Spikeweed
Bouncingbet	Fescue	Lupine	Spurge
Bromegrass, downy	Fescue, rama	Medic, black	Spurge, spotted
Bromegrass, rippit	Fiddleneck, coast	Morningglory	Starnisole, yellow
Bromegrass, smooth	Filaree	Mullein, common	Strawberry
Broomsedge	Filaree, redstem	Nightshade, whiteleaf	Sunflower, common
Bullgrass	Flabane, annual	Oil, wild	Telegraphplant
Buttercup	Foxtail	Panicum, Texas	Thistle, Russian
Buttercup, smallflower	Gallardia, rosering	Pepperweed, Virginia	Timothy
Camphorweed	Geranium, Carolina	Pigweed	Trumpet creeper
Carrot, wild	Goldenrod	Plantain, buckhorn	Vetchgrass
Catsear, spotted	Grape	Puncturevine	Vetch
Cheat	Gumweed	Ragweed, giant	Witchgrass

Uniformly apply 600 pounds per acre to control the following weeds:

Aspen, trembling	Cantagrass, red	Clover, white sweet	Smartweed, swamp
Awngrass, triple	Carpenterweed	ivy, poison	Southwest, perennial
Barley, foxtail	Chicory	Reed, common	Spurge, prostrate
Bromegrass, Japanese	Cinquefoil, common	Sandbar, field	Sumac, staghorn

Uniformly apply 800 pounds per acre to control the following weeds:

Barnyardgrass	Johnsongrass, seedling	Oatgrass, bristly	Ragweed, common
Crabgrass	Lovegrass	Poa	Saltbush
Kinggrass	Orchardgrass	Purslane, common	Sedge, bull

Uniformly apply 1600 pounds per acre to control the following weeds:

Bermudagrass	Dallisgrass	Lookalike, Venus	Vaseygrass
Cudweed			

### Woody Plant Control

Apply SPIKE 1G uniformly to the woody plant infested area or by individual plant treatment. Application can be made anytime during the year except when the ground is frozen. Effects are slow to appear and will not become apparent until sufficient moisture has carried the SPIKE 1G into the root zone of the target species. The time required to achieve control is dependent on soil type, amount of rainfall and depth of species rooting. Some species may go through several defoliations and retentions over a period of approximately two to three years prior to dying.

**Broadcast Application**

Apply SPIKE 1G using a mechanical sprayer or other device calibrated to deliver the recommended amount of material over the area to be treated.

**Individual (Spot) Woody Plant Application**

Apply SPIKE 1G by hand using 1 pound of the granules around the base of the unwanted individual woody stem. Wear protective gloves when applying granules by hand. Repeat this process for each unwanted woody plant in the area. CAUTION: DO NOT USE SPIKE 1G IN THIS MANNER IN ANY AREA WHERE DESIRABLE SPECIES ARE IN THE VICINITY OF THE PLANTS TO BE TREATED. A SMALL AMOUNT OF SPIKE 1G IN CONTACT WITH THE ROOTS OF DESIRABLE TREES OR OTHER WOODY SPECIES MAY CAUSE SEVERE INJURY OR DEATH. THE ROOTS OF SUCH PLANTS MAY EXTEND FAR BEYOND THEIR DRIP LINES.

SPIKE 1G will injure or control other herbaceous vegetation in the treated area. Therefore, do not apply where such injury cannot be tolerated. See the list of herbaceous vegetation controlled by SPIKE 1G under the Total Vegetation Control section of this label.

**Woody Plant Control—Application Rates**

SPIKE 1G applied at the rate of 200 pounds per acre will control the following species:  
*Ailanthus altissima* (Tree-of-heaven)      *Rubus* spp. (Rambles)      *Ulmus americana* (American elm)  
*Alopecurus* (Whitebrush)


SPIKE 1G applied at the rate of 300 pounds per acre will control the following species:  
*Carya texana* (Black hickory)      *Quercus stellata* (Post oak)      *Ulmus alata* (Winged elm)  
*Quercus marilandica* (Blackjack oak)      *Symphoricarpos orbiculatus* (Buckbrush)

SPIKE 1G applied at the rate of 400 pounds per acre will control the following species:  
*Acacia berlandieri* (Gumtree)      *Campylopus radicans* (Trumpet creeper)      *Larrea tridentata* (Creosotebush)  
*Acacia repida* (Blackbrush acacia)      *Celtis occidentalis* (Western hickory)      *Myrica cerifera* (Southern waxmyrtle)  
*Acer napundo* (Boxelder)      *Celtis pallida* (Gumyew)

SPIKE 1G applied at the rate of 500 pounds per acre will control the following species:  
*Acer macrophyllum* (Bigleaf maple)      *Pinus echinata* (Shortleaf pine)      *Quercus alba* (White oak)  
*Ailix rubra* (Red alder)      *Pinus virginiana* (Virginia pine)      *Rubus lacinalis* (Evergreen blackberry)  
*Galearia striata* (Sabal)      *Prunus emarginata* (Bitter cherry)      *Rubus occidentalis* (Black raspberry)  
*Juniperus virginiana* (Eastern redcedar)      *Pseudotsuga menziesii* (Douglas fir)

SPIKE 1G applied at the rate of 600 pounds per acre will control the following species:  
*Acer circinnatum* (Vine maple)      *Haplopappus tenusectus* (Burweed)      *Rhus glabra* (Smooth sumac)  
*Cornus* spp. (Dogwood)      *Liquidambar styraciflua* (Sweetgum)      *Rhus typhina* (Staghorn sumac)  
*Crataegus* spp. (Hawthorn)      *Prosopis juliflora* (Mesquite)      *Sida* (Hibiscus)  
*Fraxinus americana* (White ash)      *Prunus serotina* (Black cherry)

**PRECAUTIONS**

 SPIKE 1G IS INTENDED FOR TOTAL VEGETATION CONTROL. IT IS AN EXTREMELY ACTIVE HERBICIDE WHICH WILL KILL TREES, SHRUBS AND OTHER FORMS OF DESIRABLE VEGETATION HAVING ROOTS EXTENDING INTO THE TREATED AREA. FEEDER ROOTS OF MANY SPECIES OF DESIRABLE VEGETATION EXTEND MANY FEET BEYOND THE DRIP LINE OF THE BRANCHES. AND A VERY SMALL AMOUNT OF SPIKE 1G IN CONTACT WITH ONE FEEDER ROOT OF A TREE, SHRUB OR OTHER DESIRABLE VEGETATION MAY CAUSE SERIOUS INJURY OR DEATH TO THE ENTIRE PLANT. AN ARBORICULTURIST (TREE EXPERT) SHOULD BE CONSULTED TO HELP YOU TO DETERMINE IF THE AREA OF PROPOSED APPLICATION IS FREE OF ALL ROOTS OF DESIRABLE VEGETATION. THE EFFECT OF SPIKE 1G ON DESIRABLE VEGETATION MAY BE IRREVERSIBLE AND ITS PRESENCE IN THE SOIL MAY PREVENT GROWTH OF OTHER DESIRABLE VEGETATION FOR SOME YEARS AFTER APPLICATION. READ THE ENTIRE LABEL BEFORE USING SPIKE 1G TO DETERMINE IF THIS PRODUCT IS SUITABLE FOR THE DESIRED PURPOSE.

Do not use SPIKE 1G on areas such as walks, driveways, streets, lawns, patios, tennis courts, swimming pools, cemeteries, or other landscaped areas, or under asphalt or concrete pavement where future landscaping is planned. Do not apply on or near field crops. Do not apply on any area into which the roots of desirable vegetation may extend. Do not apply in locations where the chemical may be washed by runoff or sheet erosion in contact with roots of desirable vegetation, as severe injury or death may occur. ROOTS OF TREES, SHRUBS AND OTHER DESIRABLE VEGETATION MAY EXTEND FAR BEYOND THE DRIP LINE OF THE PLANTS BRANCHES.

**Ditchbank Usage**—Do not apply SPIKE 1G to any portion of the ditchbank that will come into direct contact with water as movement of SPIKE 1G in this water to non target plant species may result in the injury or death of those plants. Do not apply on ditches used to transport irrigation or potable water. Keep from contact with other pesticides and seeds.

Thoroughly clean all traces of SPIKE 1G from application equipment after use. DO NOT EMPTY RESIDUES CLEANED FROM APPLICATION EQUIPMENT ON AREAS WHERE THEY MAY COME IN CONTACT WITH THE ROOTS OF DESIRABLE VEGETATION OR THE WATER SOURCE FOR SUCH VEGETATION.

**HERBACEOUS PERENNIALS (NONWOODY PLANTS)**  
Do not allow domestic livestock to graze in treated areas. Do not cut forage from treated areas for feeding livestock. SPIKE 1G may injure or suppress certain herbaceous vegetation in the treated area. Therefore, do not apply where such injury cannot be tolerated. Injury to most herbaceous perennials is reduced if SPIKE 1G is applied when this vegetation is dormant.

**CAUTION**

**Human:** Harmful if swallowed. Avoid contact with skin, eyes or clothing. Avoid inhaling dust from product. Wear protective gloves when applying granules to individual woody plants by hand. In case of contact, flush with water. Environmental: Do not contaminate any body of water, ponds or streams as death or injury may occur to vegetation irrigated by such. Do not contaminate water by cleaning of equipment or disposal of wastes.

**Storage and Disposal:** The herbicidal properties of SPIKE 1G require caution in handling, storage and transportation of this product. Do not contaminate food or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container. Dispose in an incinerator or landfill approved for pesticide containers or bury in a noncropland area away from desirable plants, trees and water supply.

The manufacturer makes no warranties, express or implied, concerning this product or its use which extend beyond the description on the label. All statements made concerning this product apply only when used as directed. SPIKE 1G must be applied according to E.I. du Pont's instructions, including, but not limited to, recommended rates. Failure to do so may result in poor weed control or plant injury. E.I. du Pont expressly disclaims any liability either express or implied for the use of SPIKE 1G in conjunction with other products when such use is not in strict compliance with E.I. du Pont's written recommendations.

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