

ELANCO ID 5954

Herbicide
Spike

20P

Net Weight 50 Pounds

A surface applied herbicide for woody plant control in noncrop areas such as:

- Railroad rights-of-way
 - Utility rights-of-way
 - Industrial sites
 - Pipelines
 - Fence rows
 - Firebreaks
 - Ditchbanks
 - Along highways
 - Other noncrop and areas for the control of woody plant species
- The degree and duration of control may vary with the amount of chemical applied, soil texture, and other conditions.



Spike will kill trees and shrubs. Carefully read the precautions before using.

Active ingredient:
tebuthiuron N-[5-(1,1-dimethylethyl)-1,3,4-thiadiazol-2-yl]-N,N'-dimethylurea 20.0%
Inert Ingredients 60.0%
Contains 10 pounds active ingredient per 50 pound bag.

SPIKE—the registered trademark for Elanco Products tebuthiuron

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

EPA Reg. No. 1471-123

W.T. 8160 AVX

Directions for Use Read All Directions Carefully Before Applying

Woody Species Controlled

Apply 5 pounds SPIKE 20P per acre to control the following species

Haplopappus tenuisectus (Burweed) *Larrea tridentata* (Creosotebush) *Mimosa biuncifera* (Walt-a-minute-bush)

Apply 10 pounds SPIKE 20P per acre to control the following species.

Ailanthus altissima (Tree of heaven) *Morus nigra* (Red mulberry) *Rosa multiflora* (Multiflora rose)
Aloysia lycoides (Whitebrush) *Pinus monticola* (Western white pine) *Salvia leucophylla* (Whiteleaf sage)
Artemisia tridentata (Big sagebrush) *Pinus strobus* (Pine) *Salvia mellifera* (Black sage)
Carya gabra (Pignut hickory) *Prunus emarginata* (Bitter cherry) *Symphoricarpos orbiculatus* (Buckbrush)
Celtis occidentalis (Western hackberry) *Rhus glabra* (Smooth sumac) *Ulmus americana* (American elm)
Datura discolor (Desert thornapple) *Robinia pseudoacacia* (Black locust) *Vaccinium or Gaylussacia spp* (Huckleberry)
Lycium berlandieri (Burrhead or wolfberry)

Apply 15 pounds SPIKE 20P per acre to control the following species.

Abies balsamea (Ba'sam fir) *Condalia obtusifolia* (Lutebush condalia) *Quercus douglasii* (Blue oak)
Acacia farnesiana (Huisache) *Ilex vomitoria* (Yaupon) *Quercus marilandica* (Blackjack oak)
Acer saccharum (Sugar maple) *Larix laricina* (Tamarack) *Quercus stellata* (Post oak)
Ainus rugosa (Speckled alder) *Picea glauca* (White spruce) *Salix spp* (Willow)
Betula populifolia (Gray birch) *Populus balsamifera* (Ba'sam poplar) *Schaefferia cuneifolia* (Desert yaupon)
Carya ilicifolia (Black hickory) *Populus deltoides* (Eastern cottonwood) *Spraea tomentosa* (Hardhack)
Celtis pascada (Grangero) *Quercus chrysolepis* (Canyon live oak) *Ulmus alata* (Winged elm)

Apply 20 pounds SPIKE 20P per acre to control the following species.

Acacia berlandieri (Guajillo) *Condalia ovalata* (Bluewood condalia) *Porteria angustifolia* (Guayacan)
Acacia greggii (Catclaw acacia) *Cornus drummondii* (Roughleaf dogwood) *Prosopis juliflora* (Mesquite)
Acacia rigidula (Blackbrush acacia) *Crotalaria spp* (Hawthorn) *Prunus virginiana* (Common chokecherry)
Acacia tortuosa (Twisted acacia) *Eysenhardtia texana* (Kidneywood) *Pseudotsuga menziesii* (Douglas fir)
Acer negundo (Boxelder) *Fagus grandifolia* (American beech) *Pueraria lobata* (Kudzu)
Adenostoma fasciculatum (Chamise) *Jatropha dioica* (Leatherstem) *Quercus dumosa* (California scrub oak)
Ainus rubra (Red alder) *Leucophyllum frutescens* (Cinzo [Texas silverleaf]) *Quercus pauciflora* (Pin oak)
Carpinus radicans (Trumpet creeper) *Liquidambar styraciflua* (Sweetgum) *Quercus rubra* (Red oak)
Carya ovata (Shagbark hickory) *Myrica cerifera* (Southern waxmyrtle) *Quercus virginiana* (Live oak)
Cercocarpus betuloides (Birnleaf mountain mahogany) *Parthenocissus quinquefolia* (Virginia creeper) *Rhus typhina* (Staghorn sumac)
Colubrina texensis (Texas colubrina) *Populus grandidentata* (Bigtooth aspen) *Rubus cuneifolius* (A. egreny blackberry)
Salvia baicalensis (Shrubby blue salvia)

Apply 25 pounds SPIKE 20P per acre to control the following species.

Acer macrophyllum (Bigleaf maple) *Juniperus virginiana* (Eastern redcedar) *Pinus virginiana* (Virginia pine)
Acer pennsylvanicum (Norway maple) *Lantana camara* (Lantana) *Platanus occidentalis* (American sycamore)
Acer saccharinum (Silver maple) *Leptochloa tupeana* (Tupe tree) *Prunus serotina* (Black cherry)
Baccharis spp (Groundsel tree) *Melicope quinquemida* (Melicope) *Quercus alba* (White oak)
Cornus florida (Flowering dogwood) *Pinus banksiana* (Jack pine) *Rubus laciniatus* (Evergreen blackberry)
Fraxinus pennsylvanica (Green ash) *Pinus echinata* (Shortleaf pine) *Rubus occidentalis* (Black raspberry)
Gaultheria procumbens (Sassa) *Pinus taeda* (Loblolly pine) *Scirpus telebinthoides* (Brazilian pepper tree)

Apply 30 pounds SPIKE 20P per acre to control the following species.

Acer circinnatum (Vine maple) *Crataegus crataegus* (Cockspur hawthorn) *Rhus laurina* (Laurel sumac)
Archostaphylos uva-ursi (Greenleaf manzanita) *Diospyros virginiana* (Persimmon) *Sinus rotundifolia* (Common greenbriar)
Ceanothus cuneatus (Western blueberry) *Elaeagnus angustifolia* (Russian olive) *Ulmus parvifolia* (Chinese elm)
Ceanothus leucodermis (Whiteleaf chaparral) *Fraxinus americana* (White ash) *Ulmus rubra* (Sppery elm)

Species growing on deep profile fine textured soils or deeply rooted species may show erratic control at rates listed or require a higher rate for effective control.

GENERAL DIRECTIONS

Apply SPIKE 20P uniformly to the woody plant infested area or by individual plant treatment.

Application can be made any time during the year except when the ground is frozen or saturated with water. Effects are slow to appear and will not become apparent until after treatment has started. The SPIKE 20P will penetrate the root zone of target species. The time required to reach maximum effect depends on soil texture, amount of rainfall, and depth of species root system. Some species may die through several defoliations and re-foliations. For best results, control should be made 1 to 2 years prior to drying.

Broadcast Application

SPIKE 20P may be applied to a property or area by broadcast application. On utility rights-of-way SPIKE 20P may be applied to a utility right-of-way with application equipment such as Sprayer Models 16 and 16-J. Use of a

utility right-of-way designed to confine the spread of SPIKE 20P to the target area may result in injury or death of desirable plant species.

Individual (Spot) Woody Plant Application

Apply SPIKE 20P to the desired woody plant by the use of the applicator or by hand. If the applicator is used, use one-half ounce of the product per gallon of the unwanted woody plant. Wear protective goggles when applying by hand. Repeat the treatment on any unwanted woody plant in the area. **CAUTION: DO NOT USE SPIKE 20P IN THIS MANNER IN ANY AREA WHERE DESIRABLE SPECIES ARE IN THE VICINITY OF THE PLANTS TO BE ELIMINATED. A SMALL AMOUNT OF SPIKE 20P 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 THE HERBICIDE'S**