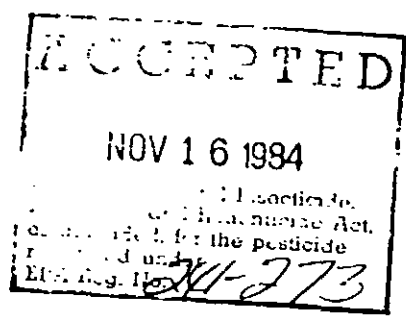


10's 6
100 -
10/5/84

Leaflet

ARSENAL[®]
herbicide



ACTIVE INGREDIENT:

2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid with 2-propanamine (1:1) salt.[†] . 27.6%

INERT INGREDIENT 72.4%

[†]Equivalent to 22.6% 2-4,5-dihydro-4-methyl-(1-methylethyl)-5-oxo-1H-imidazol-2-yl-3-pyridinecarboxylic acid or 2 pounds acid per gallon.

EPA Reg. No. 241-273

EPA Est. No.

KEEP OUT OF REACH OF CHILDREN

CAUTION!

PRECAUCION

PRECAUCION AL USUARIO: Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

In case of an emergency endangering life or property involving this product, call collect, day or night, Area Code 201-835-3100.

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AMERICAN CYANAMID COMPANY
AGRICULTURAL DIVISION
Bio-Tech Products Department
WAYNE, NJ 07470

•Trademark of American Cyanamid Company

(10/5/84)

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS

CAUTION!

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

FIRST AID

IF ON SKIN: Wash with plenty of soap and water.

IF IN EYES: Flush with plenty of water. Get medical attention if irritation persists.

PHYSICAL AND CHEMICAL HAZARDS

Spray solutions of ARSENAL should be mixed, stored and applied only in stainless steel, fiberglass, plastic and plastic-lined steel containers.

DO NOT mix, store or apply ARSENAL or spray solutions of ARSENAL in unlined steel (except stainless steel) containers or spray tanks.

ENVIRONMENTAL HAZARDS

DO NOT apply directly to any body of water. DO NOT contaminate water by cleaning of equipment or disposal of waste.

STORAGE AND DISPOSAL

PROHIBITIONS: DO NOT contaminate water, food or feed by storage or disposal.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in an approved sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

IMPORTANT

DO NOT use on food or feed crops. **DO NOT** apply on ditches used to transport irrigation water. **DO NOT** apply where runoff or irrigation water may flow onto agricultural land as injury to crops may result. Keep from contact with fertilizers, insecticides, fungicides and seeds. **DO NOT** apply or drain or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots. **DO NOT** use on lawns, walks, driveways, tennis courts, or similar areas. Prevent drift of spray to desirable plants. **DO NOT** use in California.

Thoroughly clean application equipment immediately after use. Flush tank, pump, hoses and boom with several changes of water after removing nozzle tips and screens (clean these parts separately).

GENERAL INFORMATION

ARSENAL herbicide is an aqueous solution to be mixed in water and applied as a spray for control of most annual and perennial grasses and broadleaf weeds on noncropland areas.

ARSENAL may be applied either preemergence or postemergence to the weeds; however, postemergence application is the method of choice in most situations, particularly for control of perennials. For maximum activity, weeds should be growing vigorously at the time of postemergence applications. The preemergence activity of ARSENAL will provide residual control of most weed species following a postemergence application.

ARSENAL is readily absorbed through foliage and roots and is translocated rapidly throughout the plant, with accumulation in the meristematic regions. Treated plants stop growing soon after spray application. Chlorosis appears first in the newest leaves, and necrosis spreads from this point. In perennials, the herbicide is translocated into and kills underground storage organs, thus preventing regrowth. Chlorosis and tissue necrosis may not be apparent in some plant species until two weeks after application. Complete kill of plants may not occur for several weeks.

DISCLAIMER

The label instructions for the use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the use or application of the product contrary to label instructions, all of which are beyond the control of American Cyanamid Company. All such risks shall be assumed by the user.

American Cyanamid Company warrants only that the material contained herein conforms to the chemical description on the label and is reasonably fit for the use therein described when used in accordance with the directions for use, subject to the risks referred to above.

Any damages arising from a breach of this warranty shall be limited to direct damages and shall not include consequential commercial damages such as loss of profits or values or any other special or indirect damages.

American Cyanamid Company makes no other express or implied warranty, including other express or implied warranty of FITNESS or of MERCHANTABILITY.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

ARSENAL herbicide should be used only in accordance with recommendations on this label. Keep containers closed to avoid spills and contamination.

A postemergence application of ARSENAL is recommended for control of most annual and perennial grasses and broadleaf weeds on noncropland areas such as railroad, utility and pipeline rights-of-way, utility plant sites, petroleum tank farms, pumping installations, fence rows, storage areas, nonirrigation ditchbanks and other similar areas.

MIXING INSTRUCTIONS

Mix the proper amount of ARSENAL in water in the spray tank with the agitator running. To minimize drift, a drift control agent may be added at the recommended label rate. A foam reducing agent may be added at the recommended label rate, if needed.

SPRAYING INSTRUCTIONS

Uniformly apply with properly calibrated ground equipment in 30 to 60 gallons of water per acre with a spray pressure of 25 to 50 psi. Spray volumes greater than 60 gallons per acre may be applied without reducing efficacy; however, additional nonionic surfactant such as Surfactant WK** or Ortho*** X-77 must then be added at the rate of 1 quart per 100 gallons of spray to provide optimum wetting and/or contact activity.

**Registered trademark of E. I. duPont de Nemours and Company.
***Registered trademark of Chevron Chemical Company

ARSENAL herbicide will provide postemergence control with residual control of the following weed species at the rates listed.

BIENNIAL/PERENNIAL WEEDS

Apply 2-3 pints per acre

Dandelion (Taraxacum officinale)
Field bindweed (Convolvulus arvensis)
Guineagrass (Panicum maximum)
Honeylocust (Gleditsia triacanthos)
Johnsongrass (Sorghum halepense)
Multiflora rose (Rosa multiflora)
Ox-eye daisy (Chrysanthemum leucathemum)
Paragrass (Brachiaria mutica)
Quackgrass (Agropyron repens)
Sandspur (Cenchrus spp.)
Tall fescue (Festuca arundinacea)
Vaseygrass (Paspalum urvillei)
Wild carrot (Daucus carota)

Apply 3-4 pints per acre

Dewberry (Rubus spp.)
Greenbriar (Smilax spp.)
Honeysuckle (Lonicera spp.)
Opossum grape (Cissus sicyoides)
Poison ivy (Rhus radicans)
Redvine (Brunnichia cirrhosa)
Trumpet creeper (Campsis radicans)
Virginia creeper (Aralia nudicaulis)

Apply 4-6 pints per acre

Bermudagrass (Cynodon dactylon)
Blackberry (Rubus spp.)
Canada thistle (Cirsium arvense)
Mulberry (Morus spp.)
Sumac (Rhus spp.)

ANNUAL WEEDS

Apply 2-3 pints per acre

Broadleaf signalgrass (Brachiaria platyphylla)
Carpetweed (Mollugo verticillata)
Common ragweed (Ambrosia artemisiifolia)
Curly dock (Rumex crispus)
Downy brome (Bromus tectorum)
Fleabane (Erigeron spp.)
Foxtails (Setaria spp.)
Goldenrod (Solidago spp.)
Hoary vervain (Verbena stricta)
Kochia (Kochia scoparia)
Lambsquarters (Chenopodium alba)
Lezpedeza (Lezpedeza spp.)
Marestail (Erigeron canadensis)
Pigweed (Amaranthus spp.)
Plaintain (Plantago spp.)
Smartweed (Polygonum spp.)
Sorrel (Rumex spp.)
Sowthistle (Sonchus spp.)
Sunflower (Helianthus annuus)
Wild buckwheat (Polygonum convolvulus)
Wild mustard (Brassica kaber)
Yellow woodsorrel (Oxalis stricta)

Apply 3-4 pints per acre

Cocklebur (Xanthium pennsylvanicum)
Crabgrass (Digitaria spp.)
Goosegrass (Eleusine indica)
Morningglory (Ipomoea spp.)

The higher rates should be used where heavy or well established infestations occur.

ARSENAL herbicide will provide postemergence control with residual control of the following weed species at the rates listed.

BIENNIAL/PERENNIAL WEEDS

ANNUAL WEEDS

600 - 900 gm ai/ha

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- Smartweed (Polygonum spp.)
- Sorrel (Rumex spp.)
- Sowthistle (Sonchus spp.)
- Sunflower (Helianthus annuus)
- Wild buckwheat (Polygonum convolvulus)
- Wild mustard (Brassica kaber)
- Yellow woodsorrel (Oxalis stricta)

900 - 1200 gm ai/ha

- Dewberry (Rubus spp.)
- Greenbriar (Smilax spp.)
- Honeysuckle (Lonicera spp.)
- Opossum grape (Cissus sicyoides)
- Poison ivy (Rhus radicans)
- Redvine (Brunnichia cirrhosa)
- Trumpet creeper (Campsis radicans)
- Virginia creeper (Parthenocissus quinquefolia)

900 - 1200 gm ai/ha

- Cocklebur (Xanthium pennsylvanicum)
- Crabgrass (Digitaria spp.)
- Goosegrass (Eleusine indica)
- Morningglory (Ipomoea spp.)

1200 - 1800 gm ai/ha

- Bermudagrass (Cynodon dactylon)
- Blackberry (Rubus spp.)
- Canada thistle (Cirsium arvense)
- Mulberry (Morus spp.)
- Sumac (Rhus spp.)

The higher rates should be used where heavy or well established infestations occur.