

8-1/8 INCHES

APPROVED

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. A pre-emergence application of ARSENAL 0.5 Granule is recommended for control of most annual and perennial grasses and broadleaf weeds on noncropland areas such as railroad, utility, pipeline and highway rights-of-way, petroleum tank farms, pumping installations, fence rows, storage areas, and other similar areas. ARSENAL 0.5 Granule may be applied anytime during the growing season before weeds have emerged.

See complete Directions For Use inside leaflet.

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 dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

See Disclaimer inside leaflet.

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



**0.5 Granule
For Use In Noncrop Areas**

ACTIVE INGREDIENT: Imazapyr (2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid)	0.5%
INERT INGREDIENTS	99.5%
TOTAL	100.0%

EPA Reg. No. 241-295

EPA Est. No. 39578-TX-1

**KEEP OUT OF REACH OF CHILDREN
CAUTION! ¡PRECAUCION!**

Net Contents: 6 pounds

22930-73
9/93

© Registered Trademark of American Cyanamid Company

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

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS**

CAUTION

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

ARSENAL 0.5 Granule should be mixed and stored only in lined paper bags, stainless steel, fiberglass, plastic and plastic-lined steel containers. DO NOT mix or store ARSENAL 0.5 Granule in unlined steel (except stainless steel) containers.

ENVIRONMENTAL HAZARDS

DO NOT apply directly to water, 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.

4 INCHES

Handwritten signature and date: 10/7/93

ACCEPTED
May 25 1994
Under the Federal Insecticide, Fungicide and Rodenticide Act, registered as a pesticide
EPA Reg. No. 241-295

BEST AVAILABLE COPY

PRINTING INFORMATION:
ALL COPY AND LINE ART PRINT PMS 201 MAROON.

NOTE
NEW SIZE

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 of 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 of 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.

A preemergence application of ARSENAL 0.5 Granule is recommended for control of most annual and perennial grasses and broadleaf weeds on noncrop areas such as railroad, utility, pipeline and highway rights-of-way, petroleum tank farms, pumping installations, fence rows, storage areas, and other similar areas. ARSENAL 0.5 Granule may be applied anytime during the growing season before weeds have emerged.

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 dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

APPLICATION INSTRUCTIONS

Uniformly apply ARSENAL 0.5 Granule with properly calibrated aerial or ground equipment at a rate of 200 to 300 lbs/A (1.0 to 1.5 lbs. A.E. of product per acre).

A preemergent application of ARSENAL 0.5 Granule will provide residual control of the following target vegetation species:

GRASSES

ANNUAL BLUEGRASS (*Poa Annua*)
BAHAGRASS (*Paspalum notatum*)
BEARDGRASS (*Andropogon* spp.)
BERMUDAGRASS (*Cynodon dactylon*)
BIG BLUESTEM (*Andropogon gerardii*)
BROADLEAF SIGNALGRASS (*Brachiaria platyphylla*)
CANADA BLUEGRASS (*Poa compressa*)
CATTAIL (*Typha* spp.)
CHEAT (*Bromus secalinus*)
CRABGRASS (*Digitaria* spp.)
DALLISGRASS (*Paspalum dilatatum*)
DOWNY BROME (*Bromus tectorum*)
FALL PANICUM (*Panicum dichotomiflorum*)
FESCUE (*Festuca* spp.)
FOXTAIL (*Setaria* spp.)
GOOSEGRASS (*Elymus Indica*)
GUINEAGRASS (*Panicum maximum*)
ITALIAN RYEGRASS (*Lolium multiflorum*)
JOHNSONGRASS (*Sorghum halepense*)
KENTUCKY BLUEGRASS (*Poa pratensis*)
LOVEGRASS (*Eragrostis* spp.)
ONCHARDGRASS (*Dactyloctenium*)
PARAGRASS (*Brachiaria mollis*)
PRAIRIE CORNDOGGRASS (*Spergularia pectinata*)
PRAIRIE THREEAWN (*Aristida oligantha*)
QUACKGRASS (*Agrropyron repens*)
SANDBUR (*Cenchrus* spp.)
SAND DROPSEED (*Sporobolus cryptandrus*)
SMOOTH BROME (*Bromus inermis*)
TIMOTHY (*Phleum pratense*)
TORPEDOGRASS (*Panicum repens*)
VASEYGRASS (*Paspalum urvillei*)
WILD BARLEY (*Hordeum* spp.)
WILD OATS (*Avena fatua*)
WESTERN MUHLY (*Muhlenbergia frandosa*)
WITCHGRASS (*Panicum capillare*)



American Cyanamid Company
Agricultural Products Division
Specialty Products Department
Wayne, NJ 07470 ©1993

THIS PANEL RESERVED FOR
GLUE AREA TO ATTACHED
LEAFLET TO CONTAINER CAP.

BEST AVAILABLE COPY



0.5 Granule
For Use in Noncrop Areas
EPA Reg. No. 241-296



PRINTING INFORMATION:
ALL COPY AND LINE ART PRINTS PMS
201 MAR04.

2 1/2 INCHES

3 INCHES

3 INCHES

INSIDE

OUTSIDE

3 4 5

ACTIVE INGREDIENT:
 Imazapyr (2-[4,5-dihydro-4-methyl-4-(1-methyl-1H-imidazol-2-yl)-3-pyridinocarboxylic acid] 0.5%
INERT INGREDIENTS 99.5%
TOTAL 100.0%

**KEEP OUT OF REACH OF CHILDREN
 CAUTION!/PRECAUCION!**

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

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

**PRECAUTIONARY STATEMENTS
 HAZARDS TO HUMANS**

CAUTION!

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

ARSENAL 0.5 Granule should be mixed and stored only in lined paper bags, stainless steel, fiberglass, plastic and plastic-lined steel containers.
DO NOT mix or store **ARSENAL 0.5 Granule** in unlined steel (except stainless steel) containers.

ENVIRONMENTAL HAZARDS

DO NOT apply directly to water, 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.

IMPORTANT

DO NOT use on food or feed crops. **DO NOT** treat irrigation ditches or water used for crop irrigation or for domestic uses. **DO NOT** apply where rain 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. **DO NOT** use in California.

GENERAL INFORMATION

ARSENAL 0.5 Granule is applied for control of most annual and perennial grasses and broadleaf weeds.
ARSENAL 0.5 Granule is readily absorbed through the roots and is translocated rapidly throughout the plant, with accumulation in the meristematic regions. Treated plants stop growing soon after 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.

BROADLEAF WEEDS

- BULL THISTLE (*Cirsium vulgare*)
- BURDOCK (*Arctium* spp.)
- CAMPFORYWEED (*Heterotheca subaerflaris*)
- CANADA THISTLE (*Cirsium arvense*)
- CARPETWEED (*Mollugo verticillata*)
- CAROLINA GERANIUM (*Geranium carolinianum*)
- CLOVER (*Trifolium* spp.)
- COCKLEBUR (*Xanthium strumarium*)
- COMMON CHICKWEED (*Stellaria media*)
- COMMON RAGWEED (*Ambrosia artemisiifolia*)
- DANDELION (*Taraxacum officinale*)
- DOCK (*Rumex* spp.)
- DOG FENNEL (*Eupatorium capillifolium*)
- FILAREE (*Erodium* spp.)
- FLEABANE (*Erigeron* spp.)
- GIANT RAGWEED (*Ambrosia trifida*)
- HOARY VERVAIN (*Verbena stricta*)
- HORSEWEED (*Conyza canadensis*)
- INDIAN MUSTARD (*Brassica juncea*)
- LAMBSQUARTERS (*Chenopodium album*)
- LITTLE MALLOW (*Melva parviflora*)
- MILKWEED (*Asclepias* spp.)
- MIMERS LETTUCE (*Monia perfoliata*)
- MULLEIN (*Verbascum* spp.)
- NETTLELEAF GODSEFOOT (*Chenopodium murale*)
- OXEYE DAISY (*Chrysanthemum leucanthemum*)
- PEPPERWEED (*Lepidium* spp.)
- PIGWEEED (*Amaranthus* spp.)
- PLANTAIN (*Plantago* spp.)
- POKEWEED (*Phytolacca americana*)
- PRIMROSE (*Oenothera lundiana*)
- PURSLANE (*Portulaca* spp.)
- SILVERLEAF NIGHTSHADE (*Solanum elaeagnifolium*)
- SMARTWEED (*Polygonum* spp.)
- SORREL (*Rumex* spp.)
- SOWTHISTLE (*Sonchus* spp.)
- SUNFLOWER (*Helianthus* spp.)
- SWEET CLOVER (*Medicago* spp.)
- TANSYMUSTARD (*Descurainia pinnata*)
- TEXAS THISTLE (*Cirsium texanum*)
- WESTERN RAGWEED (*Ambrosia pectoclypea*)
- WILD CARROT (*Daucus carota*)
- WILD LETTUCE (*Lactuca* spp.)
- WILD PARSNIP (*Pastinaca sativa*)
- WILD TURNIP (*Brassica campestris*)
- WOOLLYLEAF BURSAE (*Ambrosia grayi*)
- YELLOW STAR THISTLE (*Centaurea solstitialis*)
- YELLOW WOODSORREL (*Oxalis stricta*)

BEST AVAILABLE COPY

4 8 5



ACCEPTED
 Federal Insecticide,
 Fungicide, and Rodenticide Act
 Registration Number
 EPA Reg. No. 241-295

0.5 Granule For Use In Noncrop Areas

ACTIVE INGREDIENT:

Imazapyr (2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid)

INERT INGREDIENTS

TOTAL

BEST AVAILABLE COPY

0.5%

99.5%

100.0%

EPA Reg. No. 241-295

EPA Est. No. 39578-TX-1

**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

CAUTION!

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

ARSENAL 0.5 Granule should be mixed and stored only in lined paper bags, stainless steel, fiberglass, plastic and plastic-lined steel containers.

DO NOT mix or store ARSENAL 0.5 Granule in unlined steel (except stainless steel) containers.

ENVIRONMENTAL HAZARDS

DO NOT apply directly to water, 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.

IMPORTANT

DO NOT use on food or feed crops. DO NOT treat irrigation ditches, or water used for crop irrigation or for domestic uses. 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. DO NOT use in California.

GENERAL INFORMATION

ARSENAL 0.5 Granule is applied for control of most annual and perennial grasses and broadleaf weeds.

ARSENAL 0.5 Granule is readily absorbed through the roots and is translocated rapidly throughout the plant, with accumulation in the meristematic regions. Treated plants stop growing soon after 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 of 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 of any other special or indirect damages.

DIRECTIONS FOR USE

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

A preemergence application of ARSENAL 0.5 Granule is recommended for control of most annual and perennial grasses and broadleaf weeds on noncropland areas such as railroad, utility, pipeline and highway rights-of-way, petroleum tank farms, pumping installations, fence rows, storage areas, and other similar areas. ARSENAL 0.5 Granule may be applied anytime during the growing season before weeds have emerged.

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: 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.

APPLICATION INSTRUCTIONS

Uniformly apply ARSENAL 0.5 Granule with properly calibrated aerial or ground equipment at a rate of 200 to 300 lbs/A (1.0 to 1.5 lbs. A E. of product per acre).

A preemergent application of ARSENAL 0.5 Granule will provide residual control of the following target vegetation species:

GRASSES

ANNUAL BLUEGRASS (*Poa Annua*)
 BAHIA GRASS (*Paspalum notatum*)
 BEARDGRASS (*Andropogon* spp.)
 BERMUDAGRASS (*Cynodon dactylon*)
 BIG BLUESTEM (*Andropogon gerardi*)
 BROADLEAF SIGNALGRASS (*Brachiaria platyphylla*)
 CANADA BLUEGRASS (*Poa compressa*)
 CATTAIL (*Typha* spp.)
 CHEAT (*Bromus secalinus*)
 CRABGRASS (*Digitaria* spp.)
 DALLISGRASS (*Paspalum dilatatum*)
 DOWNY BROME (*Bromus tectorum*)
 FALL PANICUM (*Panicum dichotomiflorum*)
 FESCUE (*Festuca* spp.)
 FOXTAIL (*Setaria* spp.)
 GOOSEGRASS (*Eleusine indica*)
 GUINEAGRASS (*Panicum maximum*)
 ITALIAN RYEGRASS (*Lolium multiflorum*)
 JOHNSONGRASS (*Sorghum halepense*)
 KENTUCKY BLUEGRASS (*Poa pratensis*)
 LOVEGRASS (*Eragrostis* spp.)

ORCHARDGRASS (*Dactylis glomerata*)
 PARAGRASS (*Brachiaria mutica*)
 PRAIRIE CORDGRASS (*Spartina pectinata*)
 PRAIRIE THREEAWN (*Aristida oligantha*)
 QUACKGRASS (*Agropyron repens*)
 SANDBUR (*Cenchrus* spp.)
 SAND DROPSEED (*Sporobolus cryptandrus*)
 SMOOTH BROME (*Bromus inermis*)
 TIMOTHY (*Phleum pratense*)
 TORPEDOGRASS (*Panicum repens*)
 VASEYGRASS (*Paspalum urvillei*)
 WILD BARLEY (*Hordeum* spp.)
 WILD OATS (*Avena fatua*)
 WIRESTEM MUHLY (*Muhlenbergia frondosa*)
 WITCHGRASS (*Panicum capillare*)

BROADLEAF WEEDS

BULL THISTLE (*Cirsium vulgare*)
 BURDOCK (*Arctium* spp.)
 CAMPHORWEED (*Heterotheca subaxillaris*)
 CANADA THISTLE (*Cirsium arvense*)
 CARPETWEED (*Mollugo verticillata*)

CAROLINA GERANIUM (*Geranium carolinianum*)
 CLOVER (*Trifolium* spp.)
 COCKLEBUR (*Xanthium strumarium*)
 COMMON CHICKWEED (*Stellaria media*)
 COMMON RAGWEED (*Ambrosia artemisiifolia*)
 DANDELION (*Taraxacum officinale*)
 DOCK (*Rumex* spp.)
 DOGFENNEL (*Eupatorium capillifolium*)
 FILAREE (*Erodium* spp.)
 FLEABANE (*Erigeron* spp.)
 GIANT RAGWEED (*Ambrosia trifida*)
 HOARY VERVAIN (*Verbena stricta*)
 HORSEWEED (*Conyza canadensis*)
 INDIAN MUSTARD (*Brassica juncea*)
 LAMBSQUARTERS (*Chenopodium album*)
 LITTLE MALLOW (*Malva parviflora*)
 MILKWEED (*Asclepias* spp.)
 MINERS LETTUCE (*Montia perfoliata*)
 MULLEIN (*Verbascum* spp.)
 NETTLELEAF GOOSEFOOT (*Chenopodium murale*)
 OXEYE DAISY (*Chrysanthemum leucanthemum*)
 PEPPERWEED (*Lepidium* spp.)

PIGWEED (*Amaranthus* spp.)
 PLANTAIN (*Plantago* spp.)
 POKEWEED (*Phytolacca americana*)
 PRIMROSE (*Oenothera kunthiana*)
 PURSLANE (*Portulaca* spp.)
 SILVERLEAF NIGHTSHADE
 (*Solanum elaeagnifolium*)
 SMARTWEED (*Polygonum* spp.)
 SORREL (*Rumex* spp.)
 SOWTHISTLE (*Sonchus* spp.)
 SUNFLOWER (*Helianthus* spp.)
 SWEET CLOVER (*Melilotus* spp.)
 TANSYMUSTARD (*Descurainia pinnata*)
 TEXAS THISTLE (*Cirsium texanum*)
 WESTERN RAGWEED (*Ambrosia psilostachya*)
 WILD CARROT (*Daucus carota*)
 WILD LETTUCE (*Lactuca* spp.)
 WILD PARSNIP (*Pastinaca sativa*)
 WILD TURNIP (*Brassica campestris*)
 WOOLLYLEAF BURSACE (*Ambrosia grayi*)
 YELLOW STARThISTLE (*Centaurea solstitialis*)
 YELLOW WOODSORREL (*Xalis striata*)



CYANAMID

American Cyanamid Company
 Agricultural Products Division
 Specialty Products Department
 Wayne, NJ 07470

©1993

Net Contents: 40 pounds

® Registered Trademark of American Cyanamid Company

BEST AVAILABLE COPY

22903-58

9/93