

ACCEPTED  
 1-6-72  
 UNDER THE FEDERAL INSECTICIDE  
 FUNGICIDE AND RODENTICIDE ACT  
 FOR ECONOMIC POISON REGISTER-  
 ED UNDER NO. .... SUBJECT  
 TO ATTACHED COMMENTS.

302 - 346



**CAUTION! COMBUSTIBLE MIXTURE.**  
 N.Y.F.D. C. of A. No. 1313

Keep away from heat and open flame.

**GENERAL INFORMATION**

Du Pont "Hyvar" X-L Bromacil Weed Killer is a water soluble liquid to be mixed in water and applied as a spray on non-cropland areas. It is an effective general herbicide for control of brush and many annual and perennial weeds, and is particularly useful for control of perennial grasses. Effects are slow to appear and may not become apparent until the chemical has been carried into the root zone of the weeds by moisture. The degree of control and duration of effect will vary with the amount of chemical applied, soil type, rainfall, and other conditions.

"Hyvar" X-L, after mixing in water, is non-volatile, non-flammable, and non-corrosive to metals except aluminum. Do not use with aluminum spray nozzles.

**DIRECTIONS**

Apply "Hyvar" X-L just before or during the period of active growth of plants to be controlled. If dense growth is present, results will be improved if vegetation is removed before treatment. Do not apply when ground is frozen.

Before spraying, calibrate equipment to determine quantity of water necessary to uniformly cover measured area to be treated. Measure the proper amount of "Hyvar" X-L and mix into the necessary volume of water. After "Hyvar" X-L has been thoroughly mixed in the spray tank, agitation of the spray solution is not required.

Use a fixed-boom power sprayer properly calibrated to a constant speed and rate of delivery. For application with a hand-gun sprayer, use at least 200 gals. spray per acre. For treating small areas, a tank-type hand sprayer or sprinkling can may be used.

**WEED CONTROL**

To control most weeds for an extended period of time on non-cropland areas such as RAILROAD, HIGHWAY and PIPELINE RIGHT OF WAYS, PETROLEUM TANK FARMS, LUMBERYARDS, STORAGE AREAS, and INDUSTRIAL PLANT SITES:

Apply 1 1/2 to 3 gals. "Hyvar" X-L per acre to control ANNUAL WEEDS and GRASSES such as foxtail, ryegrass, wild oats, crabgrass, cheatgrass, bromegrass, ragweed, lambsquarters, puncturevine, orchardgrass and turkey mullein. When applied just prior to or after emergence of annuals, rates as low as 3/4 gal. per acre control many annual weeds and grasses in low rainfall areas and give short term control in higher rainfall areas.

Apply 3 to 6 gals. "Hyvar" X-L per acre to control PERENNIAL WEEDS and GRASSES such as smooth brome, Bahiagrass, bluegrass, redtop, purpletop,

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**HYVAR<sup>®</sup> X-L**  
 BROMACIL WEED KILLER

WATER SOLUBLE LIQUID  
 1 Gallon Contains 2 Pounds Bromacil

<b>ACTIVE INGREDIENT:</b>	
Lithium salt of bromacil (5-bromo-3-sec-butyl-6 methyluracil)	21.9%
<b>INERT INGREDIENTS</b>	78.1%
EPA Reg. No. 352-346-AA	U.S. Pat. 3,352,862

Keep out of reach of children.

**WARNING! HARMFUL OR FATAL IF SWALLOWED. COMBUSTIBLE.**  
 CAUSES EYE IRRITATION. MAY IRRITATE NOSE, THROAT, AND SKIN.

Do not get in eyes. Avoid contact with skin and clothing.  
 Avoid breathing spray mist. Wash thoroughly after handling.  
 In case of contact, flush eyes or skin with plenty of water; for eyes, get medical attention.

**IMPORTANT**—Injury to or loss of desirable trees or other plants may result from failure to observe the following: 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 contaminate domestic waters. Keep from contact with fertilizers, insecticides, fungicides, and seeds. Thoroughly clean all traces of "Hyvar" X-L from 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).

Do not re-use container; crush and bury when empty.  
 KEEP CONTAINER CLOSED WHEN NOT IN USE.

**5 U.S. GALLONS**

E. I. DU PONT DE NEMOURS & COMPANY (INC.)  
 BIOCHEMICALS DEPARTMENT, WILMINGTON, DELAWARE

continued from left panel  
 quackgrass, broomsedge, aster, dandelion, dog wild carrot. In areas with low or seasonal rainfall, acre control many perennial weeds and grasses.

Apply 6 to 12 gals. "Hyvar" X-L per acre to control same rate for OTHER HARD-TO-KILL PERENNIAL Bermudagrass, Dallisgrass, nutsedge, Vaseygrass, bane, bracken fern and horsetail. Where limited rainfall occurs during the active growth period, such as smooth X-L will not provide satisfactory control of hard-to-kill such as Johnsongrass.

Use the higher levels of the dosage ranges on ads in organic matter or carbon).

**Retreatment**—Apply 3/4 to 3 gals. "Hyvar" X-L per acre on sites where weed growth has returned.

**For Small Areas**—Three fl. oz. of "Hyvar" X-L per acre.

**BRUSH CONTROL**

To control undesirable woody plants on non-cropland areas, apply to RIGHT OF WAYS, STORAGE AREAS, INDUSTRIAL DITCHES:

Apply in spring or summer as a broadcast or basal drainage ditches, apply as a basal (spot) treatment control and prevention of damage to desirable vegetation standing in water; do not use water from treated areas in irrigation ditches nor on right of ways or other areas where desirable trees or shrubs are immediately adjacent.

**Broadcast Treatment**—Apply 2 1/4 to 5 gals. per acre on grass, and pine; apply 6 to 12 gals. per acre to control elm, winged elm, hackberry, sumac, and cottonwood. Dosage ranges on adsorptive soils (those high in organic matter).

**Basal (Spot) Treatment**—Mix 1 gal. in 5 gals. of water. Apply 2 fl. oz. per stem 2" to 4" in basal diameter; wetting agent controls woody plants such as cottonwood, red bud, sweet gum, wild cherry, willow, and winged elm.

**NOTICE TO BUYER**

Seller warrants that this product conforms to the label thereof and is reasonably fit for purposes specified in accordance with directions under normal use. Seller does not extend to use of this product contrary to the label, abnormal use conditions, or under conditions not intended. Buyer assumes all risk of any such use. Seller makes no warranty or implied.

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REG U S PAT OFF

# HYVAR X-L

BROMACIL WEED KILLER

WATER SOLUBLE LIQUID

1 Gallon Contains 2 Pounds Bromacil

**ACTIVE INGREDIENT:**

Lithium salt of bromacil (5-bromo-3-sec-butyl-6 methyluracil) . . . . . 21.9%

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**WARNING!** HARMFUL OR FATAL IF SWALLOWED. COMBUSTIBLE.  
CAUSES EYE IRRITATION. MAY IRRITATE NOSE, THROAT, AND SKIN.

Do not get in eyes. Avoid contact with skin and clothing.

Avoid breathing spray mist. Wash thoroughly after handling.

In case of contact, flush eyes or skin with plenty of water; for eyes, get medical attention.

**IMPORTANT**—Injury to or loss of desirable trees or other plants may result from failure to observe the following: 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 contaminate domestic waters. Keep from contact with fertilizers, insecticides, fungicides, and seeds. Thoroughly clean all traces of "Hyvar" X-L from 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).

Do not re-use container; crush and bury when empty.

KEEP CONTAINER CLOSED WHEN NOT IN USE.

## 5 U.S. GALLONS

E. I. DU PONT DE NEMOURS & COMPANY (INC.)  
BIOCHEMICALS DEPARTMENT, WILMINGTON, DELAWARE

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quackgrass, broomsedge, aster, dandelion, dog fennel, goldenrod, plantain and wild carrot. In areas with low or seasonal rainfall, rates as low as 2 1/4 gals. per acre control many perennial weeds and grasses.

Apply 6 to 12 gals. "Hyvar" X-L per acre to control JOHNSONGRASS; use at the same rate for OTHER HARD-TO-KILL PERENNIAL WEEDS and GRASSES such as Bermudagrass, Dallisgrass, nutsedge, Vaseygrass, saltgrass, bouncingbet, dogbane, bracken fern and horsetail. Where limited rainfall (usually less than 4 inches) occurs during the active growth period, such as some areas of the West, "Hyvar" X-L will not provide satisfactory control of hard-to-kill, deep-rooted perennial weeds such as Johnsongrass.

Use the higher levels of the dosage ranges on adsorptive soils (usually those high in organic matter or carbon).

**Retreatment**—Apply 3/4 to 3 gals. "Hyvar" X-L per acre when annual weeds and grasses reappear on sites where weed growth has been controlled.

**For Small Areas**—Three fl. oz. of "Hyvar" X-L per 250 sq. ft. is approximately 4 gals. per acre.

### BRUSH CONTROL

To control undesirable woody plants on non-cropland areas such as RAILROAD RIGHT OF WAYS, STORAGE AREAS, INDUSTRIAL PLANT SITES and DRAINAGE DITCHES:

Apply in spring or summer as a broadcast or basal (spot) treatment; for use on drainage ditches, apply as a basal (spot) treatment only. Note: For effective brush control and prevention of damage to desirable vegetation: do not apply to brush standing in water; do not use water from treated ditches for irrigation; do not use in irrigation ditches nor on right of ways or other sites where marketable timber or other desirable trees or shrubs are immediately adjacent to the treated area.

**Broadcast Treatment**—Apply 2 1/4 to 5 gals. per acre to control oak, willow, sweet gum, and pine; apply 6 to 12 gals. per acre to control brush such as American elm, winged elm, hackberry, sumac, and cottonwood. Use the higher levels of the dosage ranges on adsorptive soils (those high in organic matter or carbon).

**Basal (Spot) Treatment**—Mix 1 gal. in 5 gals. of water and apply at the rate of 1 to 2 fl. oz. per stem 2" to 4" in basal diameter; wet base of stem to run-off. Treatment controls woody plants such as cottonwood, hackberry, maple, oak, poplar, red bud, sweet gum, wild cherry, willow, and winged elm.

### NOTICE TO BUYER

Seller warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. This warranty does not extend to use of this product contrary to label use directions, or under abnormal use conditions, or under conditions not reasonably foreseeable to seller; buyer assumes all risk of any such use. Seller makes no other warranties, express or implied.

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Printed in U.S.A.

## COMBUSTIBLE MIXTURE.

N.Y.F.D. C. of A. No. 1313

Open flame.

### ADDITIONAL INFORMATION

Weed Killer is a water soluble liquid to be mixed in non-cropland areas. It is an effective general killer of many annual and perennial weeds, and is effective on perennial grasses. Effects are slow to appear and the chemical has been carried into the root zone. Degree of control and duration of effect will vary with soil type, rainfall, and other conditions.

Hyvar is non-volatile, non-flammable, and non-toxic. Do not use with aluminum spray nozzles.

### DIRECTIONS

Apply during the period of active growth of plants to be treated. Results will be improved if vegetation is not present when ground is frozen.

Measure to determine quantity of water necessary to spray the area to be treated. Measure the proper amount of necessary volume of water. After "Hyvar" X-L has been added to spray tank, agitation of the spray solution is not necessary.

Equipment should be properly calibrated to a constant speed and rate of application. For hand-gun sprayer, use at least 200 gals. spray per acre; for a tank-type hand sprayer or sprinkling can, use at least 100 gals. per acre.

### WEED CONTROL

Apply during the growing period of time on non-cropland areas such as RAILROAD RIGHT OF WAYS, PETROLEUM TANK STORAGE AREAS, and INDUSTRIAL PLANT SITES:

Apply 2 1/4 to 5 gals. per acre to control ANNUAL WEEDS and GRASSES such as crabgrass, cheatgrass, bromegrass, ragwort, vine, orchardgrass and turkey mullein. When used on annuals, rates as low as 3/4 gal. per acre control annuals in low rainfall areas and give short term control.

Apply 6 to 12 gals. per acre to control PERENNIAL WEEDS and GRASSES such as Bahiagrass, bluegrass, redtop, purpletop.

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