# Amitrol 240

**Liquid Herbicide** 

# **AGRICULTURAL**

GROUP

11

HERBICIDE



WARNING: EYE IRRITANT

Nufarm Agriculture Inc. 5507 1st Street SE Calgary, Alberta T2H 1H9 1-800-868-5444

24 Hour Emergency Response Number 1-800-424-9300

## GUARANTEE:

Amitrole ... 231 g/L

# READ THE LABEL AND BOOKLET BEFORE USING

Apply pre-planting to wheat, barley, canola, field peas, corn, soybeans, whitebeans and short rotation intensive culture poplar. Apply post-planting to apple orchards, pastures, shelterbelts, non-crop land (roadsides, fencerows and ditchbanks) and short rotation intensive culture poplar.

REGISTRATION NO. 25684
PEST CONTROL PRODUCTS ACT



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#### **GENERAL INFORMATION**

Amitrol 240 Liquid Herbicide is most effective when sprayed on foliage of actively growing plants. Good coverage is essential for complete control. For good control of annual weeds spray early, usually before weeds are 10 cm in height.

Apply in at least 50 litres of water per hectare unless otherwise stated. Good coverage of the weed is essential for good control, ensure adequate water is used to obtain good coverage.

Apply Amitrol 240 Liquid Herbicide in the early morning or evening when the humidity is higher, for the best results. Avoid application when the daytime temperature exceeds 250 C and when air conditions are very dry.

Avoid using rates higher than 20 litres/ hectare preplant in crop applications on very light soil with low organic matter. Crop damage may occur, particularly on sandy knolls.

Amitrol 240 Liquid Herbicide prevents plant chlorophyll development. Weeds usually turn white and die slowly, taking between 2-6 weeks for complete control.

Amitrol 240 Liquid Herbicide is inactivated in most soil and remains only in the root system of plant being controlled, thus it continues to affect shoots from the root until the entire plant is dead.

Amitrol 240 Liquid Herbicide is a non-selective herbicide at rates needed to control most perennial weeds. If used under desirable plants or trees, avoid contact with foliage, green stems or fruit since severe injury or destruction may result.

# DIRECTIONS FOR USE: RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, Amitrol 240 Liquid Herbicide is a Group 11 herbicide. Any weed population may contain or develop plants naturally resistant to Amitrol 240 Liquid Herbicide and other Group 11 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

## To delay herbicide resistance:

- Where possible, rotate the use of Amitrol 240 Liquid Herbicide or other Group 11
  herbicides with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group when such use is permitted.
- Herbicide use should be based on an IPM program that includes scouting, historical
  information related to herbicide use and crop rotation, and considers tillage (or other
  mechanical), cultural, biological and other chemical control practices.
- Monitor treated weed populations for resistance development.
- Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment and planting clean seed.

- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Nufarm Agriculture Inc. at 1 800 868-5444 or at www.nufarm.ca.

#### **DIRECTIONS: WEEDS IN CROPPED AREAS**

Amounts per hectare in 50-200 litres of water for ground application

CROP	FOR CONTROL OF	ACTIVE INGREDIENT	LITRES Amitrol 240 Liquid Herbicide
Preplanting corn,	Quackgrass, Canada thistle, broadleaf and annual weeds	3 - 4 kg	12.5 - 16.5
soybeans, whitebeans	Dandelion & annual weeds	1 - 2 kg	4.2 - 8.4
Alfalfa renovation	established alfalfa stands	1 - 2 kg	4.2 - 8.4

WHEN TO APPLY: PRE-PLANT SPRAY: Apply Amitrol 240 Liquid Herbicide when weeds are less than 10 cm tall and actively growing. Wait 10-14 days then plant crop under no-till or conventional till.

**Note:** Soybeans only may be planted 6 days after application at 1 kg /ha a.i. (4.2 litres Amitrol 240 Liquid Herbicide/ha.) Cultivate when corn, soybeans and white beans are 13 to 15 cm tall and again at lay-by to achieve maximum quackgrass and Canada thistle control.

CROP	FOR CONTROL OF	ACTIVE Ingredient	LITRES Amitrol 240 Liquid Herbicide
Wheat, barley, canola	Dandelion & annual weeds	1 kg	4.2

**WHEN TO APPLY: PRE-PLANT SPRAY:** Apply Amitrol 240 Liquid Herbicide up to 0-1 day before planting when weeds are less than 10 cm tall and growing actively.

CROP	FOR CONTROL OF	ACTIVE Ingredient	LITRES Amitrol 240 Liquid Herbicide
Field peas	Dandelion & annual weeds	1 kg	4.2

WHEN TO APPLY: PRE-PLANT SPRAY: Apply Amitrol 240 Liquid Herbicide up to 0-1 days before planting when weeds are less than 10 cm tall and growing actively.

Severe injury may occur to field pea crops planted 0-1 days following application of Amitrol 240 Liquid Herbicide. An interval of 5-7 days is recommended.

#### TANK MIX:

Amitrol 240 Liquid Herbicide may be tank-mixed with Roundup® or Pursuit® to improve control of other weeds. Follow the directions on the Amitrol 240 Liquid Herbicide and Roundup® or Pursuit® labels for rates, timing and use precautions.

WEED	ACTIVE INGREDIENT	LITRES Amitrol 240 Liquid Herbicide
Dandelions & annual weeds	1-2 kg	4.2 – 8.4

CROP	FOR CONTROL OF	ACTIVE Ingredient	LITRES Amitrol 240 Liquid Herbicide
Post-harvest grain, peas, after final cutting of alfalfa and clover	Canada thistle, sow thistle	3 - 4kg	12.5 – 16.5

**WHEN TO APPLY:** Spray Amitrol 240 Liquid Herbicide when regrowth is 10-15cm tall. Allow 2 weeks before working (cultivate) or otherwise disturbing thistle. Do not apply after heavy frost. (Generally after October 1)

Do not apply within 8 months of planting except:

- Soybean, corn, white bean (see pre-plant section of label).
- Wheat, barley, canola, field peas (see pre-plant section of label)

CROP	FOR CONTROL OF	ACTIVE INGREDIENT	LITRES Amitrol 240 Liquid Herbicide
Apple orchards	Poison ivy, dandelion and suppression of grasses	2.25 – 3.25 kg	9.5 – 13.5

**WHEN TO APPLY:** Spray Amitrol 240 Liquid Herbicide when dandelion and poison ivy leaves are fully developed up to 30 days before apple harvest. Use a low pressure sprayer and wet all ivy leaves and stems to ground line, direct spray to orchard floor, do not allow spray to contact the trunks or foliage of trees.

#### **DIRECTIONS:**

# PASTURES, SHELTERBELTS, NON-CROP LAND (ROADSIDES, FENCEROWS, DITCHBANKS)

Use lower rates in Eastern Canada and higher rates in Western Canada. Good coverage of the weed is essential for good control, ensure adequate water is used to obtain good coverage, i.e. 100-300 litres of water per hectare. Larger volumes of water may be used to obtain adequate coverage on certain species.

If weeds are mature it may be advisable to cut and then spray the regrowth. If practical, till 2 to 3 weeks after treatments. If cultivation is not practical then spot treat where regrowth appears or re-spray with half original rate. Do not let livestock in treated area or eat treated vegetation. Do not disturb or mow treated plants for at least 3 weeks after treatment.

AREA	ACTIVE INGREDIENT	LITRES Amitrol 240 Liquid Herbicide
Shelterbelts	4.5 – 6.75 kg	18.75 – 28

**WHEN TO APPLY:** Use in established plantings only. Apply in 100-300 litres of water per hectare as directed spray to weed foliage. Do not allow spray to contact the trunks or foliage of shelterbelt plantings. Use a hooded sprayer if necessary.

## **DIRECTIONS:**

## SHORT ROTATION INTENSIVE CULTURE (SRIC) POPLAR (Populus spp.) CROPS

Use lower rates in Eastern Canada and higher rates in Western Canada. Good coverage of the weed is essential for good control, ensure adequate water is used to obtain good coverage, i.e. 100-300 litres of water per hectare. Larger volumes of water may be used to obtain adequate coverage on certain species. If weeds are mature it may be advisable to cut and then spray the regrowth. If practical, till 2 to 3 weeks after treatments. If cultivation is not practical then spot treat where regrowth appears or re-spray with half original rate. Do not let livestock in treated area or eat treated vegetation. Do not disturb or mow treated plants for at least 3 weeks after treatment.

AREA	ACTIVE INGREDIENT	LITRES Amitrol 240 Liquid Herbicide
Short Rotation Intensive Culture (SRIC) Poplar ( <i>Populus spp.</i> ) Crop	4.5 – 6.75 kg	18.75 – 28

WHEN TO APPLY: For use in new and established plantings. Apply in 100-300 litres of water per hectare either prior to planting or post planting as directed spray to weed foliage. Do not allow spray to contact the trunks or foliage of plantings. Use a hooded sprayer if necessary. Do not mow or disturb treated plants for at least three weeks after treatment.

#### TANK MIX FOR NON-CROP AREAS:

Amitrol 240 Liquid Herbicide may be tank-mixed with Roundup® to improve control of Dandelion, Horsetail and other weeds. Follow the directions on the Amitrol 240 Liquid Herbicide and Roundup® labels for rates, timing and use precautions.

#### **DIRECTIONS: WEEDS IN NON-CROPPED AREAS**

WEED	ACTIVE INGREDIENT	LITRES Amitrol 240 Liquid Herbicide
Canada thistle, sow thistle	3 – 4 kg	12.5 – 16.5

**WHEN TO APPLY:** Apply Amitrol 240 Liquid Herbicide when most thistles are in the early bud to bloom stage. Treated plants should not be mowed, but may be tilled 3 weeks later. Do not till infested areas during the fall or spring before treatments.

WEED	ACTIVE INGREDIENT	LITRES Amitrol 240 Liquid Herbicide
Quackgrass	3 – 4kg	12.5 – 16.5

**WHEN TO APPLY:** Apply Amitrol 240 Liquid Herbicide when growth is 10 - 15 cm in height. For best results, cultivate 3 weeks after treatment. This can be followed by planting fall wheat or rye.

WEED	ACTIVE INGREDIENT	LITRES Amitrol 240 Liquid Herbicide
Dandelion	1 – 3 kg	4.2 – 12. 5

**WHEN TO APPLY:** Treat when weeds are young and actively growing. Tillage can occur 3 weeks after treatment but is not necessary.

WEED	ACTIVE INGREDIENT	LITRES Amitrol 240 Liquid Herbicide
Toadflax	4.5 – 6.75 kg	18.75 - 28

**WHEN TO APPLY:** Treat during advanced rosette to prebud stage. Till 3 weeks after treatment, when top growth is bleached. Spot treat any regrowth the following year.

WEED	ACTIVE INGREDIENT	LITRES Amitrol 240 Liquid Herbicide	
Milkweed	4.5 – 6.75 kg	18.75 - 28	

**WHEN TO APPLY:** Spray in early summer when a majority of shoots have emerged. Spot treat any regrowth the following year.

WEED	ACTIVE INGREDIENT	LITRES Amitrol 240 Liquid Herbicide	
Hoary Cross	4.5 – 6.75 kg	18.75 - 28	

**WHEN TO APPLY:** Spray during advanced rosette and bud stages. Treated area should not be mowed. If necessary retreat with one half the original rate when resprouts are 10 to 15 cm tall.

WEED	ACTIVE INGREDIENT	LITRES Amitrol 240 Liquid Herbicide
Leafy Spurge	9 – 11 kg	37.5 – 45.75

**WHEN TO APPLY:** Spray between the advanced flowering and early seed development stage. Treated areas should not be mowed but may be plowed after top growth is bleached. Spot treat regrowth the following year.

WEED ACTIVE INGREDIENT		LITRES Amitrol 240 Liquid Herbicide	
Horsetail	3 – 4 kg	12.5 – 16.5	

**WHEN TO APPLY:** Spray when horsetail is growing vigorously. Usually when 10-15 cm in height.

WEED	WEED ACTIVE INGREDIENT	
Cattails	9 – 11 kg	37.5 – 45.75

**WHEN TO APPLY:** Apply after catkins are fully formed and up to frost. Do not disturb sprayed plant. Do not apply where water will be used for irrigating, drinking or other domestic uses. Do not apply where water is not wholly confined to users property.

WEED	ACTIVE INGREDIENT	LITRES Amitrol 240 Liquid Herbicide
Poison ivy, poison oaks	2.25 kg	9.25

**WHEN TO APPLY:** Apply in 500 to 1000 litres of water per hectare as an overall spray or as a spot treatment. Apply anytime after foliage is fully developed in spring until plant begin to turn color in the fall. Spray thoroughly, wet leaves, stems and suckers to ground line.

#### DIRECTIONS: SPOT TREAMENT FOR PASTURE AND NON-CROP LAND

WEED	mL of Amitrol 240 Liquid Herbicide per 10L of water for spot treatment of 100 square metres
Dandelion, Canada Thistle, sow thistle, hoary cress, milkweed, poison ivy and toadflax	165
Horsetail, leafy spurge, quackgrass and most other weeds	460

**REMARKS:** Thoroughly wet all leaves and stems of weeds, treating at the previously stated stage. Repeat applications when new grow appears.

Do not let livestock eat treated vegetation. Keep livestock off treated area until weeds are dead and new growth has emerged.

#### NOTE TO USER:

# READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS:

The DIRECTIONS FOR USE for this product for the use(s) described below were developed by persons other than Nufarm Agriculture Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion Program. Nufarm Agriculture Inc. itself makes no representation or warranty with respect to performance (efficacy) and/or crop tolerance (phytotoxicity) claims for this product when used on the crop(s) listed below.

Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold Nufarm Agriculture Inc. harmless from any claims based on efficacy and/or phytotoxicity in connection with the use described below.

**DIRECTIONS:** for use of Amitrol 240 Liquid Herbicide to control broadleaf weeds and grasses in Spruce bareroot nursery stock.

To be applied only on Spruce (not Pine, Tamarack or other evergreen species). Application can be made in the first year in either seedbed or transplants, but only after the seedlings have set bud, at a rate of 1.7 L/ha. For actively growing seedlings or transplant bareroot Spruce beyond the first year of growth, the rate may be increased to 3.0 L/ha and this may be applied at any stage of growth. CAUTION — avoid the period of rapid shoot elongation in the spring. Use 200-500 L/ha of water and spray when weeds are 10 to 15 cm tall and actively growing.

#### PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN, Harmful if swallowed. Causes irritation to eyes. Avoid contact with skin, eyes and clothing. Avoid breathing spray mist or vapours.

Wear goggles or a face shield and chemical resistant gloves when mixing/loading product and during clean up or repair activities. For good hygiene practice, wear a long sleeved shirt and long pants while handling product.

Do not spray or allow spray drift to contaminate crops in adjacent cropland as no chemical residue in crops is permitted. Do not spray or permit drift of spray on lawns, tomatoes, shrubs, flowers and other desirable vegetation. Coarse sprays are less likely to drift.

Do not use where run-off from treated areas may contact roots of desirable plants. Do not use in greenhouses. Do not contaminate fertilizers, seeds, insecticides or fungicides by improper storage. Do not store near food or feeds.

Store container away from stoves, radiators or any place where the temperature may reach 500C. Do not store below 40C. Do not spray near sparks or an open flame.

Do not allow spray solution to remain in sprayer any longer than necessary.

Rinse all spray equipment with clean water immediately after use to prevent corrosion of metal parts. Do not use the same sprayer for other purposes unless thoroughly cleaned by rinsing all parts several times with water.

DO NOT APPLY BY AIR. DO NOT re-enter treated areas within 12 hours of application.

**CAUTION:** Do not graze the treated crops or weeds or cut for hay; sufficient data is not available to support such use.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's website at www.croplife.ca.

#### FIRST AID:

**EYES:** Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

**SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.

**INGESTION:** Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

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**INHALATION:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

#### TOXICOLOGICAL INFORMATION:

No specific antidote. Employ supportive care. Treatment should be based on judgement of the physician in response to reactions of the patient.

#### DISPOSAL:

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site.

Before taking the container to the collection site:

- Triple-or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
- 2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area dispose of the container in accordance with provincial requirements.

#### For Returnable Containers:

Do not reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

#### For Returnable - Refillable Containers:

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

If container is damaged and/or contents spilled contact manufacturer for instructions. Wear protective clothing and impervious gloves before handling spills or damaged products. Do not allow spilled product to spread. Prevent entry into ditches and waterways. Cover spill with inert sweeping compound such as dry sand, clay or sawdust and place contaminated material into an approved waste container. Place damaged container into approved waste container and mark with contents.

### **ENVIRONMENTAL PRECAUTIONS:**

Do not contaminate any body of water. Use cautions to prevent spray, spray mist, or vapours from drifting off target. Spray drift may cause damage to crops or vegetation.

## **NOTICE TO USER:**

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the PEST CONTROL PRODUCTS ACT to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

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