



E03R0B/B

GROUP

4

HERBICIDE

Nufarm

2,4-D Amine 600

Liquid Herbicide

AGRICULTURAL

CONTAINS 2,4-D AMINE SOLUTION

GUARANTEE:

2,4-D 564 g/L
(present as dimethylamine)

**READ THE LABEL AND ATTACHED
BOOKLET BEFORE USING**

For use in wheat, barley, rye, corn, strawberries, raspberries, asparagus, cranberries, established pastures, rangeland, turf, stubble land, roadsides, uncropped land and control of woody growth.

REGISTRATION NO.14726
PEST CONTROL PRODUCTS ACT

Nufarm Agriculture Inc.
5507 1st Street SE
Calgary, Alberta T2H 1H9

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

WARNING



POISON

PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN.

Avoid contact with skin, eyes and clothing. Wash concentrate from skin or eyes immediately. Do not inhale fumes. Avoid breathing spray mist. Avoid spray drift. Store the container tightly closed and away from seeds, feeds, fertilizer, plants and foodstuffs. Avoid contamination of ponds, streams, rivers and other water sources.

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., refer to www.cropro.org/

PROTECTIVE CLOTHING AND EQUIPMENT:

Handling the concentrate (mixing and loading): Wear long-sleeved shirt, long pants, chemical-resistant gloves, socks, shoes and protective eye wear (face shield or safety glasses). Rinse gloves before removal. Coveralls or a chemical-resistant apron should also be worn when open pouring from containers greater than 5L.

Handling the dilute spray solution (during application or repairing or cleaning equipment): Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes. Rinse gloves before removal. Gloves are not required during application when applicator is in an enclosed tractor or an enclosed airplane cockpit.

OPERATOR USE PRECAUTIONS:

- Wear freshly laundered clothing and clean protective equipment daily.
- Rinse gloves before removal.
- Wash hands before eating, drinking, using tobacco or using the toilet.
- If herbicide penetrates clothing, remove immediately, then wash thoroughly and put on clean clothing. Throw away clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate.
- After using the product, remove clothing and launder separately, and promptly and thoroughly wash hands and exposed skin with soap and water. Follow manufacturer's instructions for cleaning personal protective clothing and equipment. If no such instructions for washables are provided, use detergent and hot water. Keep and wash clothing and personal protective equipment separate from household laundry.
- After work, remove all clothing and shower using soap and water.

TRANSFER SYSTEM:

For containers larger than 20L: Use a transfer system that avoids open pouring when transferring the liquid concentrate from such containers into the spray tank.

FIRST AID:

If swallowed, induce vomiting by touching the back of the throat with a finger or blunt object; repeat until vomit fluid is clear. Rush patient to nearest hospital taking the label with you or contact a poison control centre. Never give anything by mouth to an unconscious person.

In case of skin contact, remove contaminated clothing and wash skin thoroughly with soap and water.

In case of eye contact, flush with plenty of water for 15 minutes and get medical attention or contact a poison control centre.

If inhaled, remove to fresh air and get medical attention or contact a poison control centre.

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 judgment of the physician in response to reactions of the patient.

STORAGE:

Store at temperatures above 0°C. If subjected to freezing temperatures, warm to at least 5°C and mix thoroughly. Insecticides and fungicides should be segregated from herbicides so as to prevent the possibility of cross contamination. **SHAKE WELL BEFORE USING.**

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:

1. 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 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.

DISPOSAL FOR RETURNABLE CONTAINERS:

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

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.

DISPOSAL FOR 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 use 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.

NOTICE TO BUYER:

Seller's guarantee shall be limited to the terms set out on the label and, subject thereto, the buyer assumes the risk to persons or property arising from the use or handling of this product and accepts the product on that condition.

NOTICE TO USER:

This 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 a control product under unsafe conditions.

DIRECTIONS FOR USE:

USE PRECAUTIONS: Avoid spray drift to any desirable vegetation NOT listed on this label as damage may occur. Avoid contamination of ponds, streams, rivers and other water sources. Do not spray during periods of high winds when spray is likely to drift. Coarse sprays are less likely to drift. Do not spray during periods of high temperatures when crops may be under stress as damage to the crop may occur.

TIMING: For best results spray when WEEDS ARE YOUNG AND ACTIVELY GROWING. Apply in good growing conditions. Application must be made before the crop canopy shields the weeds.

SPRAYER: Clean all spray equipment thoroughly before use. Select nozzle tips to apply the recommended volume per hectare. Higher water volumes will reduce the risk of crop injury. Calibrate the sprayer and adjust the boom height to ensure uniform coverage. Nozzles must be in good condition and spraying the same volume. Flat fan nozzle tips are recommended.

MIXING: Shake this product well before using. Half fill the spray tank with clean water. Add the required amount of product and agitate thoroughly. Fill the tank with clean water and agitate well before use.

NOTE: If spray solution has been left standing, agitate thoroughly before use.

RESISTANCE-MANAGEMENT RECOMMENDATIONS:

For resistance management, Nufarm 2,4-D Amine 600 Liquid Herbicide is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to Nufarm 2,4-D Amine 600 Liquid Herbicide and other Group 4 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 Nufarm 2,4-D Amine 600 Liquid Herbicide or other Group 4 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

USES:

WHEAT, BARLEY, RYE (not under seeded with legumes): Crops may be sprayed from the full 3-leaf to the early flag leaf (shot blade) stage. Do not apply after the flag leaf stage. Treatment at the 4-leaf stage usually combines maximum crop tolerance with maximum weed susceptibility. The recommended safe crop rate 0.9 litres per hectare. Higher rates may be needed to control certain weed species. Possible crop injury from these higher rates is usually offset by the increased yield of the cleaner crop. Use 50 or more litres of water per hectare. Spraying with higher volumes of water (100 or more litres of water per hectare) may reduce the risk of crop injury.

Pre-Harvest Intervals:

- Do not permit lactating dairy animals to graze fields within 7 days after application.
- Do not harvest forage or cut hay within 30 days after application.
- Withdraw meat animals from treated fields at least 3 days before slaughter.

FALL RYE, WINTER WHEAT: Treat in the spring between full tillering and just before the flag leaf stage. **DO NOT APPLY DURING AND AFTER THE FLAG LEAF STAGE. DO NOT** apply in the fall. The recommended safe crop rate is 0.9 litres per hectare. Higher rates may be needed to control certain weed species.

Possible crop injury from these higher rates is usually offset by the increased yield of the cleaner crop. Use 50 or more litres of water per hectare. Spraying with higher volumes of water (100 or more litres per hectare) may reduce the risk of crop injury.

Pre-Harvest Intervals:

- Do not permit lactating dairy animals to graze fields within 7 days after application.
- Do not harvest forage or cut hay within 30 days after application.
- Withdraw meat animals from treated fields at least 3 days before slaughter.

FIELD CORN: Apply as an overall spray before the corn is 15 cm tall (leaf extended) and/or before the 6-leaf stage. **DAMAGE TO CORN MAY OCCUR IF AN OVERALL SPRAY IS APPLIED BEYOND THIS STAGE.** The recommended safe crop rate for an overall spray is 1.0 litres per hectare. Do not exceed this safe crop rate for an overall spray. For certain weeds not controlled by Nufarm 2,4-D Amine 600 Liquid Herbicide (ie. Wild buckwheat) the use of PARDNER® is recommended. For later applications (corn 15-75 cm leaf extended), a shielded spray or directed spray with drop pipes is necessary. Keep spray off the corn foliage. **DO NOT** apply within 2 weeks of silking and tasselling. Use 100 or more litres of water per hectare. In case of very dry conditions, delay spraying until one week following rain. Avoid cultivation for two weeks following spraying. **DO NOT** add oil or surfactant.

Pre-Harvest Intervals:

- Do not permit lactating dairy animals to graze fields within 7 days after application.
- Do not harvest forage or cut hay within 30 days after application.
- Withdraw meat animals from treated fields at least 3 days before slaughter.

ASPARAGUS (Eastern Canada only): **DO NOT APPLY BY AIR.** Apply early in the season immediately after a thorough cutting or disking. The recommended safe crop rate is 1.7-2.3 litres per hectare. If emerging spears are contacted directly by spray or spray drift they may become distorted ie: twisted. Spears emerging afterwards will be normal. Nufarm 2,4-D Amine 600 Liquid Herbicide may also be applied 3 weeks after a post harvest disking with a directed spray to avoid the fern. Apply 1.7 to 2.3 litres per hectare in 50 to 200 litres of water.

STRAWBERRIES (Eastern Canada only): **DO NOT APPLY BY AIR.** Apply 2 to 4 weeks AFTER PLANTING but before the runners root in June. Use 0.95 litres per hectare in 100 to 200 litres of water. A low pressure nozzle and coarse spray are recommended to reduce drift.

Renovation Treatment: Apply 1.7 litres per hectare in 100 to 200 litres of water after harvest but before mowing. Delay mowing for a few days after application. **DO NOT** apply between mid-August and fall dormancy because of possible damage to flower bud formation. Veestar is more sensitive than Redcoat. This treatment may cause temporary distortion of leaves.

RASPBERRIES: DO NOT APPLY BY AIR. (Eastern Canada only): Apply at any time EXCEPT DURING BLOOM. Avoid spraying new shoots. Apply 0.95 litres per hectare in 100 to 200 litres of water. Higher rates may be used for spot treatments.

CRANBERRY: DO NOT APPLY BY AIR. Apply as an over the top, wipe-on-application, to actively growing weeds (June-July). Apply at the rate of one part, Nufarm 2,4-D Amine 600 Liquid Herbicide to 2.6 parts water (27.5% solution). Injury will result if crop is contacted. Apply one application per year and observe a pre-harvest interval of 50 days.

WEEDS CONTROLLED in CRANBERRIES: All labeled weeds as well as Hardhack, St. Johnswort, Alder and Purple Aster.

STUBBLE LAND, ESTABLISHED PASTURES (without legumes), RANGELAND, ROADSIDES, UNCROPPED LAND: Apply at the time of rapid growth (usually May, June and/or September). Spray thoroughly using 1.5 to 4.0 litres of product per hectare in 100 or more litres of water. (Use the higher rate for perennial weeds and susceptible woody growth; a second treatment may be required). Cultivating grain stubble and spraying after regrowth may aid in control. DO NOT apply on freshly seeded grasses and pastures until established. There is a possibility that plants poisonous to livestock will appear more palatable and could be grazed more readily after Nufarm 2,4-D Amine 600 Liquid Herbicide treatment (eg: tansy ragwort, water hemlock, poison hemlock, death camas). Suitable precautions should be taken when such plants are present. Livestock should not be allowed to graze the treated area until poisonous plants have been removed, are dead or have resumed a normal growth habit. Under conditions of good growth and adequate soil moisture, sprays can be applied up to 2 weeks before normal frost time.

DO NOT APPLY BY AIR TO ROADSIDES.

Pre-Harvest Intervals:

- Do not permit lactating dairy animals to graze fields within 7 days after application.
- Do not harvest forage or cut hay within 30 days after application.
- Withdraw meat animals from treated fields at least 3 days before slaughter.

WOODY GROWTH (non-grazing): Apply at time of rapid growth (usually May, June and/or September). Apply 2.75-5.5 litres of product per hectare in 100 or more litres of water. Use the lower rate for species that are more susceptible such as western snowberry, willow and poplars. Spray brush species up to 3 metres tall after foliage is well developed. Applications soon after leaves are fully open usually give the best results. Apply sufficient spray volume to thoroughly wet all plant parts to the ground line. Brush or trees above 3 metres tall should be cut close to the ground and sprayed when the regrowth is over 0.6 m tall.

With good growing conditions and adequate soil moisture, sprays may be applied up to 2 to 3 weeks before normal frost time.

To reduce potential drift hazard on non-crop locations LO-DRIFT® may be added. Follow all directions on the LO-DRIFT label for the correct mixing sequence.

LAWN, PARKS, GOLF COURSES: DO NOT APPLY BY AIR. Apply at time of rapid growth (usually May, June and/or September) before grasses are in the flag leaf (shot blade) stage. Apply 1.9 litres of product per hectare in 100 to 200 litres of water per hectare. DO NOT USE ON BENTGRASS OR NEWLY SEEDED LAWNS. Avoid mowing for several days before and after treatment. Do not spray within 24 hours of rainfall or during hot, dry periods. Use caution when spraying near sensitive, desirable vegetation as contact with spray drift will cause damage.

RE-ENTRY INTERVAL: Do not allow people (other than applicator) or pets on treatment area during application. Do not enter treated areas until spray has thoroughly dried.

MAXIMUM APPLICATION FREQUENCY TO TURF: For good turf/lawn management, normally two applications per year per treatment site are adequate. This does not include spot treatments.

WEEDS CONTROLLED:

SUSCEPTIBLE: Easy-to-control weeds in the seedling stage (2 to 4 leaf) and growing rapidly. Use 0.6 to 0.95 litres per hectare. Use the higher rate for larger weeds, dry or cold weather, or heavy infestations.

Annual sow thistle, bluebur, burdock (before the 4-leaf stage), cocklebur, common plantain, daisy fleabane, false flax, flixweed, goat's beard, kochia, lamb's-quarters, mustards (except dog and tansy), prickly lettuce, ragweeds, redroot pigweed, Russian pigweed, Russian thistle, shepherd's purse, stinging nettle, stinkweed, sweet clover, volunteer canola, wild radish, wild sunflower.

LESS SUSCEPTIBLE: Harder-to-control weeds in the seedling stage (2 to 4 leaf) and growing rapidly. Use 1.0 to 1.5 litres per hectare. Use the higher rate for larger weeds, dry or cold weather, or heavy infestations.

Weeds listed under susceptible plus common chickweed, common purslane, curled dock (before the 4-leaf stage), dog mustard, goosefoot, groundsel, hawkwood, heal-all, knotweed (before the 4-leaf stage), peppergoat, pineappleweed, prostrate pigweed, sheep sorrel, smartweed (Pennsylvania and Green), velvetleaf, yellow rocket (before the 4-leaf stage).

TOP GROWTH CONTROL ONLY: Use 1.0 to 1.5 litres per hectare. Biennial wormwood, blue lettuce, bull thistle, burdock, buttercup, Canada thistle, dandelion, field bindweed, gumweed, hedge bindweed, hoary cress, leafy spurge, mouse-eared chickweed, perennial sow-thistle, tartary buckwheat, teasel, wild buckwheat, yellow rocket.

USE PRECAUTIONS FOR AERIAL APPLICATION (to cereal crops, pasture, rangeland, stubble and non-crop land only)

Directions for Use:

Apply only by fixed-wing or rotary aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label.

Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

Use Precautions:

Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application as outlined in the *Basic Knowledge Requirements for Pesticide Education in Canada: Applicator Core* and *Aerial Module*, developed by CAPCO.

Do not apply to any body of water. Avoid drifting of spray onto any body of water or other non-target areas. Specified buffer zones should be observed.

Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that will result in fine particles (mist). Do not apply during periods of dead calm or when wind velocity and direction pose a risk of spray drift. Do not spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt) or aquatic habitat.

Operator Precautions:

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted.

It is desirable that the pilot has communication capabilities at each treatment site at the time of application.

The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls and goggles or face shield during mixing/loading, cleanup and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

Product Specific Precautions:

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1 800 868-5444 or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following:

Volume: Apply the recommended rate in a minimum spray volume of 30 litres per hectare.

- **Exercise special care:** Use sufficient water for even distribution.
- Use a boom pressure of 235 kPa or less. Avoid placing nozzles where spray will enter wing tip vortices.
- Do not apply this product directly to, or otherwise permit it to come into direct contact with desirable crops other desirable broadleaf plants or non-target species and do not permit spray mists to drift onto them.
- Do not use human flaggers
- **Buffer zones:** Appropriate buffer zone should be established between treatment areas and aquatic systems, and treatment areas and significant wildlife habitat.
- Do not spray in winds exceeding 10 km per hour.
- Do not spray in dead calm near sensitive plants. A "cloud" of suspended droplets may drift onto sensitive plants when the wind comes up.
- Avoid direct applications to any body of water. Do not contaminate water through spray drift or by cleaning of equipment or disposal of wastes.
- Use a minimum of 30 L/ha spray volume.
- Coarse sprays are less likely to drift, therefore, use only nozzles or nozzle configurations which minimize the production of fine spray drops. Do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure. When spraying, avoid combination of pressure and nozzle type that will result in fine particles (mist) which are more likely to drift.
- A spray thickening agent or drift retardant may be used with this product to aid in reducing spray drift.
- **Avoid Spray Drift:** Apply only when there is little or no hazard from spray drift. Small quantities of the spray, which may not be visible, may seriously injure susceptible crops and damage sensitive non-target habitat. A method must be used to detect air movement, lapse conditions, or temperature inversions (stable air) such as the use of balloons or a continuous smoke column at or near the spray site or a smoke generator on the spray equipment. If the smoke develops into layers or indicates a potential for hazardous spray drift, do not spray.

CLEANING OF SPRAYER:

Thoroughly clean the herbicide sprayer before applying any other chemical on crops that may be damaged (see USE PRECAUTIONS). Wash the outside of the sprayer and drain the tank completely. Remove and clean filters, screens and nozzle tips separately. Fill the sprayer tank with clean water. With the agitator running flush out the lines and boom, then drain.

Fill the sprayer with clean water and for each 100L add 1 L household ammonia. Operate the pump and agitator for 15 minutes. If possible, let the solution remain in the tank and hoses overnight; recirculate and flush out the lines and boom, then drain. Rinse out twice with clean water, recirculating and draining each time. DO NOT contaminate irrigation or drinking water when cleaning the sprayer.

