11/19/2009

10414



#### U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs Registration Division (7505P) Ariel Rios Building 1200 Pennsylvania Ave., NW Washington, D.C. 20460

EPA Reg. Number:	Date of Issuance:
<del>-</del>	

71368-93

NOV 19 2009

NOTICE OF PESTICIDE:

x Registration
Reregistration
(under FIFRA, as amended)

Name of Pesticide Product:

NUP-08131 Selective Herbicide

Term of Issuance Conditional

Name and Address of Registrant (include ZIP Code):

Nufarm, Inc.

150 Harvester Drive, Suite 200

Burr Ridge, IL 60527

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

- 1. Submit and/or cite all data required for the registration/reregistration review of this product when the Agency requires all registrants of similar products to submit data.
- 2. Make the following label changes:
  - A. Add the phrase "EPA Registration No. 71368-93" to the label and the Establishment Number before you release the product for shipment.
  - B. Add the "Net Contents" to the labeling prior to releasing this product for shipment.

COMMENTS CONTINUED ON PAGE 2 OF THIS NOTICE OF REGISTRATION.

Signature of Approving Official:

James Tompkins Product Manager 25 Herbicide Branch

Registration Division (7\$05

Date:

NOV 19 2009

EPA Form 8570-6

page 2 EPA Reg. No. 71368-93 Comments Continued:

3. Submit the following data required for the registration of this pesticide product within 1 year from the date of this Notice of Registration:

EPA Guideline Data Number	Guideline Descriptor
830.6317	Storage Stability Study
830.6320	Corrosion Characteristics

Observations should be made at 0, 3, 6, 9 and 12 month intervals and submit the results electronically along with the hard copy.

4. Submit one (1) copy of the final printed labeling before you release this product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product under the enclosed stamped copy of the label constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Enclosure

# **NUP-08131**

## **Selective Herbicide**

For control of certain broadleaf weeds in wheat, barley, oats and rye

#### **ACTIVE INGREDIENTS:**

Octanoic acid ester of bromoxynil* (3,5-dibromo-4-hydroxybenzonitrile)	. 17.88%
Heptanoic 'acid ester of bromoxynil* (3,5-dibromo-4-hydroxybenzonitrile)	. 17.30%
2,4-D 2-ethylhexyl ester**	. 46.37%
OTHER INGREDIENTS:	. 18.45%
TOTAL:	.100.00%

Contains xylene range/petroleum distillates

- \* Equivalent to approximately 2.5 pounds of bromoxynil per gallon
- \*\* Equivalent to approximately 3.125 pounds 2,4-D per gallon

# WARNING / AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300 For Medical Emergencies Only, Call (877) 325-1840

ACCEPTED

NOV 19 2009

Under the Pederal Inscalade, Fungleide, and Rod-reicide Aci, as amended, for the presideregistered under EPA Rep. No. 1/3/4-93

EPA REG. NO. 71368-EPA EST. NO.

**NET CONTENTS:** 

71368-00000.20090109.EPA.NEW

Manufactured For NUFARM INC. 150 Harvester Drive Burr Ridge, IL 60527



## PRECAUTIONARY STATEMENT HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING / AVISO

May be fatal if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE):

Some materials that are chemical-resistant to this product are made of barrier laminate, butyl rubber, nitrile rubber or viton. If you want more options, follow the instructions for category F on an EPA chemical-resistance category selection chart.

#### Applicators and other handlers must wear:

- . Long-sleeved shirt and long pants
- Chemical-resistant gloves (except for pilots)
- · Shoes plus socks
- · Chemical-resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate

See engineering controls for additional requirements.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **Engineering Control Statement:**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d) (4-6)], the handler PPE (personal protective equipment) requirements may be reduced or modified as specified in the WPS. Pilots must use an enclosed cockpit that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.240(d)(6)].

#### **USER SAFETY RECOMMENDATIONS**

#### **Users Should:**

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets
  on skin, wash immediately with soap and water.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

FIRST AID		
IF SWALLOWED	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>	
IF IN EYES	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
FON SKIN OR CLOTHING Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.		
	HOT LINE NUMBER	

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.

5014

#### **ENVIRONMENTAL HAZARDS**

This pesticide may be toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark [except as noted on appropriate labels]. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash waters or rinsate.

This product has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

**NOTICE:** This product contains low volatile 2-ethylhexyl ester. At high air or ground surface temperatures, vapors from this product may cause injury to susceptible plants. This fact should be considered when applying this product.

#### **DIRECTIONS FOR USE**

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

Read the entire label before using the product. Use strictly in accordance with label precautionary statements and directions.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

APPLICATION BY CHEMIGATION must be done by fixed pipe, overhead sprinkler systems or hand moved pipe. If hand moved pipe is used for chemigation, the pipe must not be handled in any way until 24 hours after chemigation has been completed and residues have been flushed from the system. When applying by chemigation, no person may enter the application site unless in an enclosed webside

**AERIAL APPLICATION:** Aerial application is prohibited within 300 feet of residential areas (e.g., homes, schools, playgrounds, shopping areas, hospitals, etc.).

Do not apply with backpack or hand-held application equipment.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statement of this label about personal protective equipment (PPE) and restricted-entry interval (REI). The requirements in this box only apply to users of this product that are covered by the WPS.

Do not enter or allow worker entry into treated areas during the REI of 24 hours.

Exception: If the product is soil-injected or soil-incorporated, the WPS, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is: coveralls, chemical-resistant footwear plus socks and chemical-resistant gloves made of any water-proof material, and protective eyewear.

#### **GENERAL USE PRECAUTIONS**

#### **GENERAL INFORMATION**

This product is formulated as an emulsifiable concentrate of octanoic acid and heptanoic acid esters of bromoxynil containing the equivalent of 2.5 pounds of bromoxynil per gallon and the 2-ethylhexylester of 2.4-D containing 3.125 pounds per gallon of 2.4-D.

This product is a postemergence herbicide for control of important broadleaf weeds infesting wheat, barley, oats and rye. Optimum weed control is obtained when this product is applied to actively growing weed seedlings. This product is primarily a contact herbicide, therefore, thorough coverage of the weed seedlings is essential for optimum control.

This product has little residual activity. Therefore, subsequent flushes of weeds will not be controlled by the initial treatment. Generally, crops that form a good canopy will help shade subsequent weed flushes.

Occasional transitory leaf burn may occur. The temporary leaf burn is similar to that seen with liquid fertilizer. Because the activity of this product is mainly contact, recovery of the crop is generally rapid with no lasting effect. Frequency and amount of leaf burn may be greater when crops are stressed by abrasive winds, cool to cold evening temperatures or mechanical injury, such as that caused by hail, sleet or insect feeding. To reduce the potential for temporary leaf burn, applications should be made to dry foliage in the recommended spray volumes per acre when weather conditions are not extreme.

#### MIXING, LOADING AND HANDLING INSTRUCTIONS

#### 2.5 Gallon Containers

It is strongly recommended that special care be taken in mixing and loading this product. Hands should be placed on the container in such a way as to avoid possible drip or splash. Correct procedures for mixing and loading can be obtained from Nufarm Americas, Inc.

#### **Bulk Containers**

If you will handle a total of 48 gallons or more of this product per day, you must use a mechanical transfer system for all mixing and loading operations. If this product is packaged in a 30 gallon or larger container, you must use a mechanical transfer system which terminates in a drip-free hard coupling which may be used only with a spray or mix tank which has been fitted with a compatible coupling. If you do not presently own or have access to a mechanical transfer system with this type of coupling, contact your dealer for information on how to obtain such a system or to modify your present system. When using a mechanical transfer system, do not remove or disconnect the pump or probe from the container until the container has been emptied and rinsed. The pump or probe system must be used to rinse the empty container and to transfer the rinsate directly to the mixing or spray tank.

This product alone: Fill the spray tank 1/2 to 3/4 full with clean water. Begin agitation and add the recommended amount of this product. Add water to the spray tank to the desired level. Maintain sufficient agitation to ensure a uniform spray mixture during application.

#### TANK MIXES

Unless otherwise prohibited on this label or the label of an intended tank mix product, this product may be applied in combination with any pesticide registered for the same crop, timing, and method of application. Observe the most restrictive label statements of various tank mix products used.

IMPORTANT: PESTICIDE TANK MIXES MAY INCREASE THE RISK OF MIXING INCOMPATIBILITIES, REDUCED EFFECTIVENESS AND/OR CAUSE CROP INJURY OR LOSS. TO THE EXTENT ALLOWED BY APPLICABLE LAW, ANY LIABILITY FOR LOSS, INJURY OR DAMAGE RESULTING FROM A TANK MIXTURE NOT SPECIFIED ON THIS LABEL OR IN MANUFACTURER'S SUPPLEMENTAL LABELING DISTRIBUTED FOR THIS PRODUCT IS SPECIFICALLY DISCLAIMED BY MANUFACTURER.

#### COMPATIBILITY

Before full-scale mixing of this product with other pesticides, fertilizers, secondary plant nutrients, adjuvants, surfactants or oils, it is advisable to determine the compatibility of the proposed mixture. Use proportionate quantities of each ingredient and mix in a small container. Always mix one product thoroughly with the diluent before adding another product. If no incompatibility is evident after 30 minutes, the mixture is generally compatible for spraying. To evaluate potential short term effects of applying the mixture, test the combination on a few plants or a small area before larger-scale treatments. Wait at least 2 to 3 days for problems to become apparent.

IMPORTANT: MIXING WITH OTHER SUBSTANCES MAY INCREASE THE RISK OF MIXING INCOMPATIBILITIES, REDUCED EFFECTIVENESS AND/OR CAUSE CROP INJURY OR LOSS. TO THE EXTENT ALLOWED BY APPLICABLE LAW, ANY LIABILITY FOR LOSS, INJURY OR DAMAGE RESULTING FROM A MIXTURE NOT SPECIFIED ON THIS LABEL OR IN MANUFACTURER'S SUPPLEMENTAL LABELING DISTRIBUTED FOR THIS PRODUCT IS SPECIFICALLY DISCLAIMED BY MANUFACTURER.

#### SPRAYABLE LIQUID FERTILIZERS AND SPRAY ADDITIVES

This product can be applied in combination with sprayable liquid fertilizer or spray additives such as surfactants (including but not limited to the following Wilbur-Ellis surfactants: EDT Concentrate and IN-PLACE®) or crop oil concentrate. When tankmixing with liquid fertilizer, always add the fertilizer to the spray tank first and agitate thoroughly before adding this product. Always predetermine the compatibility with liquid fertilizer by mixing small proportional quantities in advance. Agitation must be maintained during filling and application operations to ensure that this product is evenly mixed with the fertilizer. Leaf burn may occur when this product is applied with liquid fertilizer, but new leaves are not adversely affected.

**NOTICE:** Fertilizers and spray additives can increase foliage leaf burn when applied with this product. Do not apply fertilizers or spray additives with this product if leaf burn is a major concern due to environmental conditions, crop or variety sensitivity to this product. If this product is mixed with liquid fertilizer, the fertilizer should compose no more than 1/2 the total spray mix.

#### **APPLICATION PROCEDURES**

This product can be applied to registered use areas by ground, aerial and sprinkler irrigation equipment.

#### **GROUND APPLICATION**

Select a spray volume and delivery system that will ensure thorough and uniform spray coverage. For optimum spray distribution and thorough coverage use of flat fan nozzles spaced no more than 20 inches on the boom with a spray pressure of 40-50 psi are recommended. Nozzle types, nozzle spacing and lower spray pressures that product coarse spray droplets may not provide adequate coverage of the weeds to ensure optimum control. Raindrop® nozzles and flood nozzles are not recommended as weed control with this product may be reduced. A spray volume of 10 to 20 gallons per acre (GPA) is recommended for optimum spray coverage. A maximum ground speed of 10 mph is suggested. Ground applications made when dry dusty field conditions exist may provide reduced weed control in wheel track areas. Applications using less than 10 gallons per acre may result in reduced weed control.

When weed infestations are heavy, use of higher spray volumes will be helpful in obtaining uniform weed coverage. If you are unsure of the infestation level or size of crop, consult your local agronomist or extension service.

Do not apply when winds are gusty or when other conditions favor poor spray coverage and/or off target spray movement.

#### **AERIAL APPLICATION**

Use orifice discs, cores and nozzle types and arrangements that will provide for optimum spray distribution and maximum coverage. A minimum spray volume of 5 GPA and a maximum pressure of 40 psi are recommended. A minimum spray volume of 3 gallons per acre may be used if crop canopy and weed density allow adequate spray coverage. Aerial applications using less than 5 gallons of spray volume per acre may result in reduced weed control.

Do not apply during inversion conditions, when winds are gusty or when other conditions favor poor spray coverage and/or off target spray movement. Off target spray movement can be minimized by increasing the spray volume per acre and not applying when winds exceed 10 mph.

#### SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, air blast, chemigation) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

#### **Droplet Size**

When applying sprays that contain 2,4-D as the sole active ingredient, or when applying sprays that contain 2,4-D mixed with active ingredients that require a Coarse or coarser spray, apply only as a Coarse or coarser spray (ASAE standard 572) or a volume mean diameter of 385 microns or greater for spinning atomizer nozzles.

When applying sprays that contain 2,4-D mixed with other active ingredients that require a Medium or more fine spray, apply only as a Medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

#### Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition and there are not sensitive areas (including, but not limited to, residential areas, bodies of water, known habitat for non target species, non target crops) within 250 feet downwind. If applying a Medium spray, leave one swath unsprayed at the downwind edge of the treated field

#### **Temperature Inversions**

If applying at wind speeds less than 3 mph, the applicator must determine if: a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

#### Susceptible Plants

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Susceptible crops include, but are not limited to, cotton, okra, flowers, grapes (in growing stage), fruit trees (foliage), soybeans (vegetative stage), ornamentals, sunflowers, tomatoes, beans, and other vegetables, or tobacco. Small amounts of spray drift that might not be visible may injure susceptible broadleaf plants.

#### Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of 2,4-D herbicides. Where states have more stringent regulations, they must be observed.

#### Equipmen<sup>®</sup>

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

Additional requirements for aerial applications:

The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety. When applications are made with a crosswind, the swath will be displaced downwind. The applicator must compensate for this by adjusting the path of the aircraft upwind.

Additional requirements for ground boom application:

Do not apply with a nozzle height greater than 4 feet above the crop canopy.

Additional requirements for liquid products applied as a spray and containing an ester form of 2,4-D (e.g. 2,4-D butoxyethyl ester, 2,4-D ethylhexyl ester, 2,4-D isopropyl ester):

2,4-D esters may volatilize during conditions of low humidity and high temperatures. Do not apply during conditions of low humidity and high temperatures.

#### SPRINKLER IRRIGATION APPLICATION

This product can be applied through sprinkler irrigation systems to wheat, barley, oats and rye.

Apply this product through sprinkler systems including center pivot, lateral move, side (wheel) roll, solid set or hand move irrigation systems only. If hand moved pipe is used for chemigation, the pipe must not be handled in any way until 24 hours after chemigation has been completed and residues have been flushed from the system. When applying by chemigation, no person may enter the application site unless in an enclosed vehicle. Do not apply this product through any other type of irrigation system.

#### SPECIFIC REQUIREMENTS FOR APPLICATION THROUGH AUTOMATED SPRINKLER IRRIGATION SYSTEM

- The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- 2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. Do not apply when wind speed favors drift beyond the area intended for treatment.
- 8. Agitation is recommended in the pesticide supply tank when applying this product.
- 9. This product should be applied continuously for the duration of the water application with center pivot and continuous lateral move systems. Application of this product should be made during the last 30-45 minutes of the irrigation set with other overhead sprinkler systems.
- 10. For best performance, set the sprinkler system to deliver approximately 0.5 inch or less of water per acre.
- 11. Remove scale, pesticide residues and other foreign matter from the supply tank and entire injector system. Flush with clean water
- 12. If this product is diluted in the supply tank, fill the tank with half of the water amount desired, add this product and then add remaining water amount with agitation. Always dilute with at least 4 parts water to 1 part of this product.
- 13. Start the sprinklers and then inject this product into the irrigation line. This product should be injected with a positive displacement pump into the main line at least 8 feet ahead of a right angle turn to insure adequate mixing. Refer to this product label for detailed information on application rates and timings.

#### **CHEMIGATION USE RESTRICTIONS AND PRECAUTIONS**

Application of more than 0.5 inch/acre of irrigation water may result in decreased product performance on certain soils.

Do not apply when conditions favor drift, when system connections or fittings leak, or when nozzles do not provide uniform distribution.

Allow sufficient time for pesticide to be flushed through all the lines and nozzles before turning off irrigation water.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

Do not connect an irrigation system used for pesticide application to a public water system.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

A person knowledgeable of the chemigation system and responsible for its operations, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

#### **WEEDS CONTROLLED**

Postemergence application this product will control the following weeds when sprayed in the seedling stage. Weed stage of growth is listed in the chart that follows:

#### MOST SUSCEPTIBLE BROADLEAF WEED SPECIES

Annual sowthistle Black mustard Black nightshade Common cocklebur Common lambsquarters Common tarweed Cow cockle Cutleaf nightshade Eastern black nightshade Coast fiddleneck Field pennycress Green smartweed Hairy nightshade Horned Poppy Jimsonweed Ladysthumb Lanceleaf sage London rocket Marshelder

Pennsylvania smartweed

Pepperweed spp. Redroot pigweed Russian thistle

Shepherdspurse Silverleaf nightshade

Sunflower<sup>1</sup>
Tall Waterhemp
Tartary buckwheat
Tumble mustard
Wild buckwheat

Wild mustard Yellow rocket (Sonchus oleraceus)
(Brassica nigra)
(Solanum nigrum)
(Xanthium strumarium)
(Chenopodium album)
(Hemizonia congesta)
(Saponaria vaccaria)
(Solanum triflorum)
(Solanum ptycanthum)
(Amsinckia intermedia)
(Thlaspi arvense)
(Polygonum scabrum)
(Solanum sarachoides)
(Glaucium comiculatum)

(Datura stramonium) (Polygonum persicaria) (Salvia reflexa)

(Sisymbrium irio) (Iva xanthifolia)

(Polygonum strumarium) (Lepidium app.)

(Amaranthus retroflexus)

(Salsola kali)

(Capsella bursa-pastoris) (Solanum elaeagnifolium)

(Helianthus annuus) (Amaranthus tuberculatus) (Fagopyrum tataricum) (Sisymbrium altissimum) (Polygonum convolvulus) (Sinapis arvensis)

(Barbarea vulgaris)

#### SUSCEPTIBLE BROADLEAF WEED SPECIES

Blue (purple) mustard Common groundsel Common ragweed Corn chamomile Corn gromwell Fumitory Giant ragweed Hemp sesbania Henbit Ivyleaf morningglory Knawel Kochia Mayweed Prostrate knotweed Puncture vine Redroot pigweed Smooth pigweed Spiny pigweed Tall morningglory Tall Waterhemp Tansy mustard Tarweed Velvetleaf

Wild radish

(Chlorispora tenella) (Senecio vulgaris) (Ambrosia artemisiifolia) (Anthemis arvensis) (Lithospermum arvense) (Fumaria officinalis) (Ambrosia triflda) (Sesbania exaltata) (Lamium amplexicaule) (Ipomoea hederacea) (Scleranthus annuus) (Kochia scoparia) (Anthemis cotula) (Polygonum aviculare) (Tribulus terrestris) (Amaranthus retroflexus) (Amaranthus hybridus) (Amaranthus spinosus) (Ipomoea putpurea) (Amaranthus tuberculatus) (Descurainia pinnata) (Hemizonia spp.) (Abutilon theophrasti) (Raphanus raphanistrum)

Weeds germinating after spraying will not be controlled.

<sup>&</sup>lt;sup>1</sup>For control of sunflower, delay application until first sunflower seedlings emerging are 4 inches in height.

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## WHEAT, BARLEY, OATS AND RYE NUP-08131 DIRECTIONS

•		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	RATE (ounce/acre)	CROP	WEEDS
NUP-08131	12.8	Apply to wheat, barley, oats and rye throughout the United States. Apply from the 3 leaf stage but before the crop reaches the boot stage.	MOST SUSCEPTIBLE BROAD- LEAF WEEDS: Apply to weeds up to the 8 leaf stage or 4 inches in height, whichever comes first. If weed forms rosette, apply before weeds exceed 2 inches in diameter.
	15.4 – 20.5	As above.	SUSCEPTIBLE BROADLEAF WEEDS: Apply to weeds up to the 4 leaf stage or 2 inches in height, whichever comes first. If weed forms rosette, apply before weeds exceed 1 inch in diameter.
·	20.5	As above.	Apply to henbit, knawel and mayweed up to the 4 leaf stage or 2 inches in height, whichever comes first. Apply to kochia and tansy mustard for improved control when these weeds exceed the recommended stage of growth or are growing under cool dry conditions.
	Chemigation Only 20.5	Apply to wheat, barley, oats and rye throughout the United States from the 3 leaf stage but before the boot stage. Apply through automated sprinkler irrigation systems with mechanical transfer loading system only. See MIXING LOADING AND HANDLING INSTRUCTIONS section for complete details.	Apply to MOST SUSCEPTIBLE and SUSCEPTIBLE broadleaf weeds up to the 4-leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.

### NUP-08131 TANK MIXTURE DIRECTIONS

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	. RATE (ounce/acre)	CROP	WEEDS
NUP-08131 + Rhonox® (or other brands of MCPA ester herbicides registered for use as specified)	9.6 – 20.5 + 4 - 8	Apply to wheat, barley, oats and rye from tillering stage, but before boot stage.	For control of MOST SUSCEPT-IBLE and SUSCEPTIBLE weeds as listed on this label and improved control of redroot pigweed and kochia. Apply to weeds up to the 8 leaf stage, 3 inches in height or 2 inches in diameter, whichever comes first. Apply to kochia and redroot pigweed up to 2 inches in height or diameter.
NUP-08131 + Glean® (or other brands of chlorsulfuron herbicides registered for use as specified) + nonionic surfactant such as R-11	9.6 – 15.4 + 1/6-1/3 + 1 – 2 qt/100 gal of water	Apply to wheat and barley from the 3 leaf stage but before the crop reaches the boot stage. Follow the Glean® label for crop rotation and restrictions.	This tank mix improves control of broadleaf weeds such as henbit, tansy mustard and chickweed. Apply to weeds up to the 8-leaf stage, 4 inches in height or 2 inches in diameter, whichever comes first.
NUP-08131 + Finesse® (or other brands of chlorsulfuron plus metsulfuron-methyl herbicides registered for use as specified) + nonionic surfactant such as R-11	9.6 – 15.4 + 1/6-1/3 + 1 – 2 qt/100 gal of water	Apply to wheat and barley from the 3-leaf stage but before the crop reaches the boot stage. Follow the Finesse® label for crop rotation and restrictions.	This tank mix improves control of broadleaf weeds such as henbit, tansy mustard and chickweed. Apply to weeds up to the 8-leaf stage, 4 inches in height or 2 inches in diameter, whichever comes first.
NUP-08131 + Ally® (or other brands of metsulfuronmethyl herbicides registered for use as specified) + nonionic surfactant such as R-11	9.6 – 15.4 + 1/10 + 1 – 2 qt/100 gal of water	Apply to wheat and barley from the 3-leaf stage but before the crop reaches the boot stage. Follow the Ally® label for crop rotation and restrictions.	This tank mix improves control of broadleaf weeds such as henbit, tansy mustard and chickweed. Apply to weeds up to the 8-leaf stage, 4 inches in height or 2 inches in diameter, whichever comes first.
NUP-08131 + Banvel® (or other brands of dicamba dimethylamine salt herbicides registered for use as specified)	9.6 - 15.4 + 2 - 4	Fall seeded wheat from the 3-leaf stage but before jointing. Spring seeded wheat from the 3- to 5-leaf stage of growth.	This tank mix improves control of broadleaves such as prostrate knotweed and kochia. Apply to weeds up to the 8-leaf stage, 3 inches in height or 2 inches in diameter, whichever comes first. Apply to kochia up to 2 inches in height or diameter.

# NUP-08131 TANK MIXTURE DIRECTIONS (CONTINUED)

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	RATE (ounce/acre)	CROP	WEEDS
NUP-08131 + Harmony® Extra (or other brands of tribenuron-methyl plus thifensulfuron methyl herbicides registered for use as specified) + nonionic surfactant such as R-11	9.6 – 15.4 + 3/10-1/2 + 1 – 2 qt/100 gal of water	Winter wheat. Apply from the 3-leaf stage but before the 3rd node is detectable. Follow the Harmony® Extra label for crop rotation and restrictions.  Spring wheat and barley. Apply after the 3-leaf stage but before the 1st node is detectable. Follow the Harmony® Extra label for crop rotation and restrictions.	This tank mix improves control of broadleaf weeds such as henbit, chickweed and redroot pigweed.  Apply to weeds up to the 8-leaf stage, 4 inches in height or across, whichever comes first.
NUP-08131  + Amber®  + nonionic surfactant such as R-11	9.6 – 15.4 0.28 - 0.56 + 1 – 2 qt/100 gal of water	Apply to wheat and barley from the 3-leaf stage, but before the flag leaf is visible. Follow the Amber® label for crop rotation and restrictions.	This tank mix improves control of broadleaves such as henbit, tansy mustard, and pigweed. Apply to weeds up to the 4-leaf stage, 4 inches in height or 2 inches in diameter, whichever comes first.
NUP-08131 +  Express® (or other brands of tribenuron-methyl herbicides registered for use as specified) + nonionic surfactant such as R-11	9.6 – 15.4 + 1/6-1/3 + 1 – 2 qt/100 gal of water	Wheat and barley. Apply from the 3-leaf stage but before the flag is visible. Follow the Express® label for crop rotation and restrictions.	This tank mix improves control of Broadleaf weeds such as henbit, chickweed, redroot pigweed and suppression of Canada thistle. Apply to annual weeds up to the 8-leaf stage, 4 inches in height or across, whichever comes first and to Canada thistle 4 to 8 inches tall with 2 to 6 inches of new growth.
NUP-08131 + Curtail® or Curtail® M (or other brands of clopyralid plus 2,4-D triisopropanol-amine or clopyralid plus 2-ethylhexyl ester of MCPA herbicides registered for use as specified)	9.6 – 15.4 + 2 pints	Apply to wheat and barley after the crop begins to tiller up to the 1st node detectable.	This tank mix improves control of kochia, wild buckwheat and suppression of Canada thistle. Apply to annual broadleaf weeds up to the 8-leaf stage, 4 inches in height or 2 inches in diameter and to Canada thistle in the rosette to prebud stage.
NUP-08131 + Sencor® or Lexone® Selective Herbicide (or other brands of metribuzin herbicides registered for use as specified)	12.8 + 1/8-3/16 lb ai	Winter wheat in Idaho, Oregon and Washington. Apply in spring after growth has started and secondary roots with a minimum of 3 to 4 tillers have been established, but before the forming of joints in the stem. Avoid application when crop has experienced winter kill, frost damage, disease or drought.	This tank mix improves control of broadleaf weeds such as chickweed, filigree, henbit. Apply to weeds up to the 4-leaf stage, 2 inches in height or diameter, whichever comes first. A recognized authority should be consulted concerning the use of this mixture in your area.

## NUP-08131 TANK MIXTURE DIRECTIONS (CONTINUED)

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	RATE ounce/acre)	CROP	WEEDS
NUP-08131 + Assert®	12.8 – 20.5 + 1 -1 1/2 pints/acre	Apply to wheat and barley from the 3-leaf stage but before boot stage. Follow the Assert® label for crop rotation and restrictions.	This tank mix will provide wild oat control in addition to broadleaf weeds. Apply to wild oats at the 1-to 4-leaf stage and broadleaf weeds up to the 8-leaf stage, 4 inches in height or 2 inches in diameter, whichever comes first. Use Assert at 1-1/2 pints/A west of the Rocky Mountains or if wild oats have initiated tillering. For spray volumes in excess of 10 GPA, add 0.3 fluid oz of nonionic surfactant for each gallon in excess of 10 GPA.

Restrictions and Precautions: Wheat, Barley, Oats and Rye

- Do not graze treated fields within 45 days after application of this product.
- Do not apply when crops are under moisture stress.
- Do not apply when crop canopy covers the weeds as poor control will result.
- · Reduced weed control may occur when weeds are stressed from lack of moisture or cold temperatures.
- Refer to labels of products used in tank mixture for additional restrictions and precautions.
- Do not plant rotational crops within 30 days following application of this product.
- Do not harvest within 14 days of application.
- Do not make more than one preharvest application per crop cycle.
- The total cumulative rate must not exceed 0.5 lb/A bromoxynil (25.6 oz/A of this product) per season.

#### STORAGE AND DISPOSAL

Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

PESTICIDE STORAGE: Store at temperatures below 100°F. If allowed to freeze, remix before using.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

#### **CONTAINER DISPOSAL:**

Nonrefillable Containers 5 Gallons or Less: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

Nonrefillable containers larger than 5 gallons: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable containers larger than 5 gallons: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

#### WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. To the extent consistent with applicable law, (1) the goods delivered to you are furnished "as is" by manufacturer or seller and (2) manufacturer and seller make no warranties, guarantees, or representations of any kind to buyer or user, either express or implied, or by usage of trade, statutory or otherwise, with regard to the product sold, including, but not limited to merchantability, fitness for a particular purpose, use, or eligibility of the product for any particular trade usage. Unintended consequences, including but not limited to ineffectiveness, may result because of such factors as the presence or absence of other materials used in combination with the goods, or the manner of use or application, including weather, all of which are beyond the control of manufacturer or seller and assumed by buyer or user. This writing contains all of the representations and agreements between buyer, manufacturer and seller, and no person or agent of manufacturer or seller has any authority to make any representation or warranty or agreement relating in any way to these goods.

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