

77425 524-466

12717



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505C)
401 "M" St., S.W.
Washington, D.C. 20460

EPA Reg.
Number:

524-466

Date of Issuance:

DEC 15 1994

Term of Issuance:

Conditional;

Expires: JUL 31 1997

Name of Pesticide Product:

Battalion Herbicide

NOTICE OF PESTICIDE:

- Registration
- Reregistration

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Monsanto Company
700 14th Street, N.W., Suite 1100
Washington, D.C. 20005

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 data required to change this registration to an unconditional FIFRA sec. 3(c)(5) registration. The required data are listed in item #2 through 7.
2. Submit acceptable aquatic plant studies to fulfill Guideline Series 123-2. We acknowledge that studies to fulfill this requirement have been submitted and are currently pending Agency review.
3. Submit acceptable aquatic organism chronic toxicity studies to fulfill Guideline Series 72-4. These studies must be submitted no later than March 15, 1996.
4. Submit an acceptable protocol for a small scale prospective groundwater monitoring study (\$166-1). The protocol must be submitted no later than February 1, 1995. Once the protocol is accepted by the Agency, the study is due within two (2) years of the date of such acceptance. Please refer to the Agency review dated September 16, 1994 regarding the environmental fate and groundwater data for details concerning the requirements for this study.

Signature of Approving Official:

Date:

DEC 15 1994

5. Submit an acceptable analytical method for detection of residues in meat and meat by-products. We acknowledge that methods to fulfill this requirement has been submitted and are currently pending Agency validation.

6. Submit the following toxicology studies performed on the metabolite 3-chlorosulfonamide acid:

- a. 90-Day feeding study in the rat (§82-1). This study must be submitted no later than March 15, 1996.
- b. Developmental toxicity in the rat [§83-3(a)]. This study must be submitted no later than March 15, 1996.
- c. The three standard mutagenicity studies [84-2(a), 84-2(b), and 84-4]. These studies must be submitted no later than December 15, 1995.

7. Literature search and telephone survey with state and federal field agents and other sources (i.e., Nature Conservancy and Universities) to identify locations of selected endangered plants relative to sorghum/turf sites to be determined by the Environmental Fate and Effects Division. We note that corn and potato surveys are being performed by other registrants and that Monsanto is only responsible for the sorghum/turf surveys. This information is due to the Agency by January 31, 1996. The elements listed below are to be followed for this investigation:

- a. In general, Monsanto will seek to obtain the most specific information available as to where endangered plants are located relative to the use sites and provide as much descriptive information regarding the location of sorghum/turf use and endangered wetland plant sites (i.e., sorghum or turf field located "X" miles from "XX" Road, and endangered wetland plant located 1/2 mile north of Highway "XXX").
- b. Monsanto will contact the Agency before initiating this investigation and provide quarterly interim reports.
- c. Monsanto will identify and call experts that are knowledgeable about specific locations of endangered plant species. Experts are expected to inform Monsanto as to the likelihood of endangered plants being located in a certain county.
- d. If a particular endangered plant has been seen or found in a particular county, Monsanto will probe further until the specific location of the plant is determined.

- e. Information, such as if the endangered plant is located up or downstream from a use site, should be provided. If a plant is upstream from the use site and falls within the distance of concern (i.e., half a mile from the field), then the Agency may conclude that a "may affect" does not exist in this situation.
- f. Monsanto will promptly notify the agency if an endangered plant is found very near a sorghum or turf field.

8. Make the following label changes before you release the product for shipment:

- a. Revise the EPA Registration Number to read, "EPA Reg. No. 524-466".
- b. Add the restriction "Do not apply by air."
- c. Add the restriction "Do not apply this product through any type of irrigation system."
- d. Please note that the groundwater advisory, currently appearing as the second paragraph of the Environmental Hazards section, may be removed from the labeling.
- e. Although the text describing the rotational crop restrictions state that no time interval is necessary before planting sorghum, the chart indicates that a two month interval is necessary. One of these should be revised so that the time interval is consistent.

9. Submit one copy of the revised final printed label for the record 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 sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

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

Joanne I. Miller
Product Manager (23)
Fungicide-Herbicide Branch
Registration Division (7505C)

Enclosure

DR: 305-7546 FHB/PM2.3		CONCURRENCES					
SYMBOL	7505C						
SURNAME	D. KENNY						
DATE	12/15/94						

ACCEPTED
with COMMENTS
In EPA Letter Dated

DEC 15 1994

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.

524-466

BATTALION®

BROADLEAF HERBICIDE BY MONSANTO

Battalion® is a selective herbicide for the control of velvetleaf, cocklebur and other broadleaf weeds in field crops. This product is recommended as an early preplant surface-applied, preplant incorporated, or preemergence herbicide. Battalion offers effective broadleaf control across various tillage systems and is intended for use in tank mixtures with label-approved insecticides.

Read the entire label before using this product.
Use only according to label instructions.
Read "LIMIT OF WARRANTY AND LIABILITY", which appears in the label booklet, before buying or using. If terms are not acceptable, return at once unopened. REFORMULATION OR REPACKAGING IS PROHIBITED.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

Keep out of reach of children.

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.)

CAUSES SUBSTANTIAL BUT TEMPORARY EYE INJURY. HARMFUL IF SWALLOWED
Do not get in eyes or on clothing

FIRST AID: IF IN EYES, immediately flush with plenty of water for at least 15 minutes. Get medical attention.
IF SWALLOWED, remove visible particles from mouth and rinse mouth thoroughly with water. Swallow water to dilute. Get medical attention. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON

Personal Protective Equipment (PPE)

Applicators and other handlers must wear long-sleeved shirt and long pants, shoes plus socks and protective eyewear.

Discard clothing and other materials that have been heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry

When handlers use closed systems or enclosed cabs 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 requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations:

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

In case of emergency involving this product,
Call Collect, day or night, (314) 694-4000.

Environmental Hazards

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

DIRECTIONS FOR USE

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

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.

For more product information, call toll-free 332-3111.

Agriculture

Use this product only in accordance with the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)]. Refer to supplemental "Use Requirements" information about this product.

Storage

Do not contaminate water, food, or feed by storage or disposal.

DISPOSAL:

Wastes resulting from the use of this product cannot be used or discharged into surface water, ground water, or in accordance with local, state, or federal procedures.

Emptied container retained for reuse. Observe all labeled safety directions. Do not reuse container for any other purpose.

Do not reuse container for any other purpose. Do not puncture and do not incinerate, or, if allowed by burning. If burned, do not breathe fumes. (See label booklet for more information.)

ACTIVE INGREDIENTS

*Methyl 5-[[[4,6-dimethyl-2-pyridinyl]amino]sulfonyl]pyrazole-4-carboxylate

INERT INGREDIENTS

* Manufactured by Nisus

EPA Reg. No. 524-466
Product is protected by a patent.
©Battalion is a registered trademark of Monsanto Company.

NET

Battalion® is a selective herbicide for the control of velvetleaf, cocklebur and other broadleaf weeds in field corn. This product is recommended as an early preplant surface-applied, preplant incorporated, or preemergence treatment. Battalion offers effective broadleaf control across various tillage systems and is intended for use in tank mixtures with labeled grass herbicides.

®Battalion is a registered trademark of Monsanto Company.

1994-1

A-000.01

Read the entire label before using this product.

Use only according to label instructions.

Read "LIMIT OF WARRANTY AND LIABILITY" before buying or using. If terms are not acceptable, return at once unopened.

REFORMULATION OR REPACKAGING IS PROHIBITED.

LIMIT OF WARRANTY AND LIABILITY

This Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for Use label pamphlet ('Directions') when used in accordance with those Directions under the conditions described therein. NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein.

Buyer and all users shall promptly notify this Company of any claims whether based in contract, negligence, strict liability, other tort or otherwise.

10/11

Buyer and all users are responsible for all loss or damage from use or handling which results from conditions beyond the control of this Company, including, but not limited to, incompatibility with products other than those set forth in the Directions, application to or contact with desirable vegetation, unusual weather, weather conditions which are outside the range considered normal at the application site and for the time period when the product is applied, as well as weather conditions which are outside the application ranges set forth in the Directions, application in any manner not explicitly set forth in the Directions, moisture conditions outside the moisture range specified in the Directions, or the presence of products other than those set forth in the Directions in or on the soil, crop or treated vegetation.

THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE LIMIT OF THE LIABILITY OF THIS COMPANY OR ANY OTHER SELLER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE) SHALL BE THE PURCHASE PRICE PAID BY THE USER OR BUYER FOR THE QUANTITY OF THIS PRODUCT INVOLVED, OR, AT THE ELECTION OF THIS COMPANY OR ANY OTHER SELLER, THE REPLACEMENT OF SUCH QUANTITY, OR, IF NOT ACQUIRED BY PURCHASE, REPLACEMENT OF SUCH QUANTITY. IN NO EVENT SHALL THIS COMPANY OR ANY OTHER SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES.

Buyer and all users are deemed to have accepted the terms of this LIMIT OF WARRANTY AND LIABILITY which may not be varied by any verbal or written agreement.

.....
.....
.....
.....
.....
.....
.....
.....

11/1/81

User Safety Recommendations:

Users should:

- * Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- * Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

In case of emergency involving this product,
Call Collect, day or night, (314) 694-4000.

Environmental Hazards

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

DIRECTIONS FOR USE

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

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.

For more product information, call toll-free 1 (800) 332-3111.

(11)

PRECAUTIONARY STATEMENTS

Hazards to Humans
and Domestic Animals

Keep out of reach of children.

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.)

CAUSES SUBSTANTIAL BUT TEMPORARY EYE INJURY.

HARMFUL IF SWALLOWED.

Do not get in eyes or on clothing.

FIRST AID: IF IN EYES, immediately flush with plenty of water for at least 15 minutes. Get medical attention.

IF SWALLOWED, remove visible particles from mouth and rinse mouth thoroughly with water. Swallow water to dilute. Get medical attention. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear long-sleeved shirt and long pants, shoes plus socks and protective eyewear. Discard clothing and other materials that have been heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems or enclosed cabs 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 requirements may be reduced or modified as specified in the WPS.

9/27/14

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 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 statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. Exception: if the product is soil-injected or soil-incorporated, the Worker Protection Standard, 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, waterproof gloves, shoes plus socks and protective eyewear.

Storage and Disposal

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

DISPOSAL:

Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures.

Emptied container retains vapor and product residue. Observe all labeled safeguards until container is destroyed.

Do not reuse container. Triple rinse container, then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

GENERAL INFORMATION

APPLICATION EQUIPMENT AND INSTRUCTIONS

Use sufficient volume of water based spray carrier to provide uniform spray distribution. Choose nozzles which provide optimum spray distribution and coverage at the appropriate pressure (psi). Use only ground application equipment. Thoroughly clean and calibrate equipment. Avoid streaking, skips, or overlaps during applications.

Apply Battalion to fields with optimum fertility to ensure proper corn growth and development.

Crop growth reduction may occur under abnormally wet or saturated soil conditions. **Avoid application to untilled, poorly drained areas.** The following applications may aggravate crop response under prolonged saturated soil moisture conditions:

- * Counter[™] insecticide applied in furrow.
- * Applications of Battalion more than 1 week ahead of planting.

Apply Battalion[®] herbicide in conventional and reduced tillage systems. Unless Pioneer[®] IR hybrids are planted, avoid use where no tillage has been performed, especially where crop residue is excessive (e.g. undisturbed corn stalks, alfalfa sod, wheat straw, or CRP acres).

Some hybrids may be more sensitive to herbicides than others. Your seed agronomist can help you avoid using hybrids with known sensitivity to sulfonylurea herbicides.

Unless Pioneer IR corn hybrids are planted, DO NOT apply this product to coarse textured soils (sand, loamy sand, sandy loam) which have less than two (2) percent organic matter.

Battalion[®] herbicide may be applied only one time with a total application not to exceed 10 ounces of product by weight (0.094 pounds active ingredient) per acre per use season.

Following a soil application of this product (0.065 to 0.094 pounds of active ingredient per acre), a single postemergence application of Permit[®] herbicide may be made at recommended rates (0.032 to 0.063 pounds active ingredient per acre). For this sequential program, the combined maximum rate per season should not exceed 0.157 pounds active ingredient per acre. If this application sequence is used, it is recommended to apply Permit herbicide in combination with another herbicide which has a different mode of action. Refer to the Permit herbicide label for use instructions.

Thoroughly clean application equipment immediately after Battalion use and prior to spraying crops other than corn. Prepare a tank cleaning solution which consists of a 2 percent solution of household ammonia. Use sufficient cleaning solution to thoroughly rinse all surfaces.

MIXING INSTRUCTIONS

Before mixing in the spray tank, it is recommended that compatibility be tested by mixing all components in a small container in proportionate quantities as listed below under the "TANK MIXTURES" section. This compatibility test is particularly important when using a sprayable fluid fertilizer carrier.

For tank mixtures, add individual formulations to the spray tank in the following sequence: carrier, dry flowables, liquid flowables, emulsifiable concentrates, drift control additive, water soluble liquids followed by nonionic surfactant.

Fill the spray tank to about one-third of the desired volume. Add the recommended amounts of herbicides and additives. Complete the filling process while maintaining agitation. Remove the hose from the mixing tank immediately after filling to avoid siphoning back into the carrier source.

Spray solutions should be applied within 24 hours after mixing.

Refer to the following USE RATE GUIDES for application rates and weeds controlled.

Refer to the specific product labels and observe all precautions, mixing and application instructions for all products used in tank mixtures.

SOIL TEXTURE RECOMMENDATIONS

For use on medium to fine texture soils greater than 1 percent organic matter. DO NOT apply this product on coarse soils which have less than 2 percent organic matter.

The following is a complete list of the soil texture groups:

<u>Soil Texture Group</u>	<u>Soil Texture</u>
Coarse	sand, loamy sand, sandy loam
Medium	loam, silt loam, sandy clay loam
Fine	silty clay loam, clay loam, sandy clay, silty clay, clay

001/4

WEEDS CONTROLLED

**BATTALION® HERBICIDE
USE RATE GUIDE**

BATTALION Use Rate = 7 to 10 ounces of product by weight per acre
= 0.065 to 0.094 pounds of active ingredient per acre

Weed Species

-
- Cocklebur, common
 - Jimsonweed
 - Kochia
 - Lambsquarters, common
 - Mustard, wild
 - Nutsedge, yellow *
 - purple *
 - Pigweed, redroot
 - Pigweed, smooth
 - Radish, wild
 - Ragweed, common
 - Smartweed, Pennsylvania
 - Sunflower, common
 - Velvetleaf
 - Waterhemp, tall

* Suppression only.

TANK MIXTURES

BATTALION plus
Harness®, Harness® Xtra, Micro-Tech®, Partner®, Dual™,
Eradicane™, Sutan +™, Surpass™, or Frontier™
controls the above listed weeds plus the following:

Weed Species

-
- Barnyardgrass
 - Carpetweed
 - Crabgrass
 - Foxtail
 - Galinsoga
 - Goosegrass
 - Groundcherry, cutleaf
 - Panicum, fall
 - Purslane
 - Nightshade
 - Sandbur, field
 - Signalgrass
 - Sida, prickly
 - Sprangletop, red
 - Witchgrass

Refer to the labels for Harness, Harness Xtra, Micro-Tech, Partner, Dual, Eradicane, Sutan, Surpass, and Frontier for use instructions and restrictions.

**BATTALION plus ROUNDUP® plus
Harness, Harness Xtra, Micro-Tech, Partner,
Dual, Surpass, or Frontier**

Battalion may be applied in combination with Roundup herbicide for preplant burndown of emerged annual grasses and broadleaf weeds. The addition of Harness, Harness Xtra, Micro-Tech, Partner, Dual, Surpass, or Frontier to the tank mixture will provide preemergence control of annual grasses. Ammonium sulfate should be added when Roundup is used in combination with these herbicides. Banvel or 2,4-D also may be applied in this tank mixture for enhanced preplant burndown of broadleaf weeds.

Refer to the Roundup, Banvel and 2,4-D labels for use instructions, weeds controlled, and application restrictions.

BATTALION plus Bladex™

Battalion may be applied in combination with Bladex herbicide for the control of annual grasses and broadleaf weeds. The addition of Bladex to the tank mixture will provide preemergence control of annual grasses.

Refer to the Bladex label for use instructions, weeds controlled, and application restrictions.

ROTATIONAL CROP INFORMATION

Battalion treated field corn fields may be rotated or replanted to milo, field corn, soybeans or wheat (spring or winter) only. Do not replant or rotate to soybeans within 10 months or wheat within 3 months of an application of Battalion. Corn or milo can be replanted in the same growing season provided the maximum rate of this active ingredient (0.157 pounds per acre) per season is not exceeded.

**ROTATIONAL CROP INFORMATION
TIME INTERVAL BEFORE REPLANTING
(from last Battalion application)**

<u>Crop</u>	<u>Replanting Interval (Months)</u>
Field corn	0
Grain sorghum	2
Spring Wheat	3
Winter Wheat	3
Soybeans	10

Refer to individual product labels to determine rotational crop restrictions when tank mixtures or sequential treatments are used.

ACTIVE INGREDIENT:

* Methyl 5-[[(4,6-dimethoxy-2-pyrimidinyl) amino] carbonylamino sulfonyl]-3-chloro-1-methyl-1-H-pyrazole-4-carboxylate	15.0%
---	-------

INERT INGREDIENTS:	85.0%
-------------------------------------	-------

	<u>100.0%</u>
--	---------------

* Manufactured by Nissan Chemical Industries, Ltd.

Product is protected by U.S. Patent No. 4,668,277.

) ®Battalion, ®Harness (EPA Reg. No. 524-473), ®Micro-Tech, ®Partner and ®Roundup are registered trademarks of Monsanto Company.

®Permit is a registered trademark of, and used under license from, Nissan Chemical Industries, Ltd.

®Pioneer is a registered trademark of Pioneer Hi-Bred International, Inc.

"Banvel and "Frontier are trademarks of Sandoz Ltd.

"Bladex is a trademark of E.I. du Pont de Nemours & Co., Inc.

"Counter is a trademark of American Cyanamid Company.

"Dual is a trademark of Ciba-Geigy Corporation.

) "Eradicane, "Surpass and "Sutan' are trademarks of Zeneca Group Company.

MONSANTO COMPANY
AGRICULTURAL PRODUCTS
ST. LOUIS, MISSOURI 63167 U.S.A.

In case of emergency involving this product,
Call Collect, day or night, (314) 694-4000.
