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US ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDES PROGRAMS
REGISTRATION DIVISION (75-767)
WASHINGTON, DC 20460

EPA REGISTRATION NO.

51036-267

DATE OF ISSUANCE

AUG 17 1999

TERM OF ISSUANCE

Conditional

NAME OF PESTICIDE PRODUCT

Asulam Liquid Herbicide

NOTICE OF PESTICIDE: REGISTRATION
 REREGISTRATION
(Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended)

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

Micro Flo Company
P.O. BOX 772099
Memphis, TN 38117

NOTE: Changes in labeling formula 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 U.S. 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.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this 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 reregistered in accordance with FIFRA Section 4(g)(2)(C). Reregistration under this section of the Act does not eliminate the need for continual reassessment of the registration of this product. Reregistration under the Asulam RED is conditional until you have provided this Agency a final printed label reflecting the conditions of reregistration on a page attached to this notice of Pesticide, Reregistration.

If the 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 constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

Joanne L. Miller
Product Manager (20)
Herbicide Branch
Registration Division (7503)

Attached (conditions)
Enclosure (Stamped Label)

ATTACHMENT IS APPLICABLE.

SIGNATURE OF APPROVING OFFICIAL

Joanne L. Miller

DATE

AUG 17 1999

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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AUG 17 1999

EPA Registration No. 51030-267

Conditions of Reregistration Under Section 4(g)(2)(C)

1. Add to the "Environmental Hazards" section directly below the section title "Environmental Hazards", the "Ground Water" statements required under the Asulam RED.
2. Revise the pre-harvest interval under the "Restrictions and Precautions: Sugarcane" section to read: "The following pre-harvest intervals for ASULAM Liquid Herbicide applications to sugarcane must be observed: 1. Mainland U.S.A. (except Louisiana) - 140 days; 2 Louisiana only - 100 days and 3) Hawaii - 400 days.
3. Revise the "Turf" section to add the restriction: "For sod farm use only".
4. Revise "Christmas Tree Plantings" and "Non-Cropland" sections, to limit the rate to a single application at 1 gallon/A per year; and add the restriction "Aerial application is prohibited" to both sites.
5. Add the spray drift information required by the EPA Asulam RED, pages 70 thru 73, or delete all directions for aerial application on label.

CONCURRENCES

SYMBOL							
SURNAME							
DATE							

Ed Note: RED label in response to R-P letter of 4/26/99

ASULAM Liquid Herbicide

For Agricultural or Commercial Use Only
Not for Use by Homeowners

For Postemergent Weed Control in Sugarcane, Turf, Ornamentals, Christmas Tree Plantings, and Non-Cropland

ACTIVE INGREDIENT: Sodium salt of asulam (methyl sulfanilylcarbamate)36.2%
INERT INGREDIENTS:.....	63.8%
TOTAL:.....	100.0%

*Equivalent to 33.1% asulam or not less than 3.34 lbs. per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

STATEMENT OF PRACTICAL TREATMENT

IF ON SKIN: Wash with plenty of soap and water. Get medical attention.

IF IN EYES: Flush with water for 15 minutes and get medical attention if irritation persists.

For product use information or medical emergencies call 1-800-451-8461.

For Transportation Emergencies ONLY Call Chemtrec 24 Hours A Day at 1-800-424-9300.

EPA Reg. No. 51036-267

EPA Est. No. 51036-GA-001

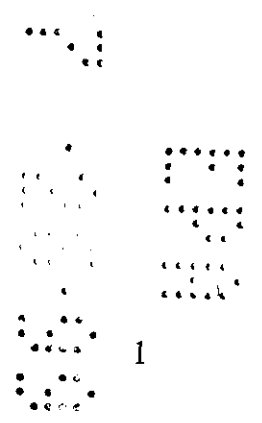
**ACCEPTED
with COMMENTS
In EPA Letter Dated**

AUG 17 1999

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

51036-267

Manufactured For:
MICRO FLO COMPANY
P.O. BOX 772099
MEMPHIS, TN 38117



PRECAUTIONARY STATEMENTS

CAUTION

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

- 1. Long-sleeved shirt and long pants
- 2. Chemical resistant gloves (such as Nitrile, Butyl, Neoprene, and/or Barrier Laminate)
- 3. Shoes plus socks

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

ENGINEERING CONTROL STATEMENTS

When handlers use closed systems, enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard for agricultural pesticides [40 CFR 170.24 (d) (4-6)], the handler personal protective equipment requirements may be reduced or modified as specified in the Worker Protection Standard.

USER SAFETY RECOMMENDATIONS

Users should leave the area, remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Users should 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.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not clean equipment or dispose of equipment washwater in a manner that will contaminate resources. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water by cleaning of equipment or disposal of wastes.

DIRECTIONS FOR USE

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

Read entire label before using this product.

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 and restricted-entry intervals. 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.

Personal Protective equipment 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 are:

- 1. Coveralls.
- 2. Chemical resistant gloves.
- 3. Shoes plus socks.

STORAGE AND DISPOSAL

STORAGE

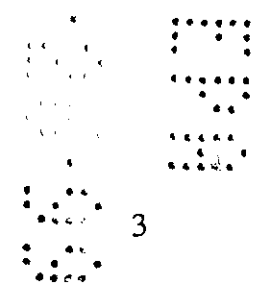
Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Store at temperatures above 20°F.

PESTICIDE DISPOSAL

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL

Triple rinse or equivalent. Puncture and dispose of in a sanitary landfill, by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.



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RETURNABLE/REFILLABLE CONTAINERS

After use, return the container to the point of purchase or designated locations. This container must only be refilled with Asulam Herbicide. DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE. Prior to refilling, inspect thoroughly for damage such as cracks, punctures, abrasions and damaged or worn out threads on closure devices. Do not refill or transport damaged or leaking containers. Check for leaks after refilling and before transportation. For information on the disposal of unused, unwanted product, contact Micro Flo Company at 1-800-451-8461. If the container is not being refilled, return it to the point of purchase.

GENERAL INSTRUCTIONS AND INFORMATION

APPLICATION INSTRUCTIONS

Do not apply ASULAM Liquid Herbicide through any type of irrigation system.

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 regulations.

SUGARCANE

ASULAM Liquid Herbicide can be applied to either plant cane or cane grown from stubble. Apply as a water mix spray for ground applications. Use 15 to 100 gallons of water per acre, depending on local practice. For aerial application, ASULAM Liquid Herbicide should be mixed in 3 to 5 gallons of water per acre, except in Hawaii, where 5 to 10 gallons of water per acre should be used.

Addition of an adjuvant cleared for use on growing crops to ASULAM Liquid Herbicide water mix spray will improve weed control when environmental conditions are not optimal. Use either a non-ionic surfactant containing a minimum of 80% active ingredient at the rate of 1 to 2 quarts per 100 gallons (0.25 to 0.5% V/V) of water mix spray or a crop oil concentrate containing 80 to 85% paraffin based petroleum oil and 15 to 20% non-ionic surfactant the rate of 4 quarts per 100 gallons (1% V/V) of water mix spray.

The rates of ASULAM Liquid Herbicide given below are for broadcast applications. For banded application, reduce the rate proportionally to the width of the band according to the following formula:

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

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

Band width (inches)

Row width (inches) X Broadcast rate = Band Rate/Acre

For spot treatments, use a 5% v/v ASULAM Liquid Herbicide spray (1 gallon per 20 gallons of water). Do not exceed 8 pints of ASULAM Liquid Herbicide per acre per treatment.

SUGARCANE
Single Application Per Growing Season

WEED SPECIES	SPECIAL INSTRUCTIONS	RATE
Itchgrass or Raoulgrass (Rottboellia exaltata)	Apply when the grass is 8 inches tall or less addition of surfactant is necessary)	8 pints/acre
Johnsongrass (Sorghum halepense)	Apply when the grass is between 12 to 18 inches tall. Johnsongrass should be actively growing and the average air temperature should be at least 60°F or higher.	
Paragrass or Californiagrass (Brachiaria mutica or Panicum purpurascens)	Apply when the grass is between 6 to 8 inches tall or less.	
Crabgrass (Digitaria spp.)	If treatment is made before the grass reaches seed head formation then the lower rate should be used. If the grass is in early seed head formation then the higher rater should be used.	6 to 8 pints/acre
Alexandergrass (Brachiaria plantaginea), Foxtail (Setaria spp.), Goosegrass (Eleusine indica), Broadleaf Panicum (Panicum adspersum), Barnyardgrass (Echinochloa crusgalli)	If treatment is made when the grass is 6 to 8 inches tall or less, then the lower rate should be used. If the grass is greater than 8 inches tall, then the higher rate should be used.	

SUGARCANE
Two Applications Per Growing Season

This may be required when initial weed infestations are heavy and/or when rhizome Johnsongrass is present. Two applications may also be used when treating weed species which germinate at different times during one growing season.

WEED SPECIES	SPECIAL INSTRUCTIONS	1ST APPLICATION	2ND APPLICATION
Crabgrass (Digitaria spp.)	At each application the grass should be treated before seed head formation.	6 to 8 pints/acre	6 to 8 pints/acre
Itchgrass or Raoulgrass (Rottboellia exaltata)	At each application the grass should be 8 inches tall or less (addition of surfactant is necessary).	8 pints/acre	8 pints/acre
Johnsongrass (Sorghum halepense)	At each application the grass should be between 12 and 18 inches tall.	8 pints/acre	8 pints/acre

RESTRICTIONS AND PRECAUTIONS: SUGARCANE

- ASULAM Liquid Herbicide should be used when the weeds are actively growing.
- Cover crops may be planted if plowed under and not grazed.
- Do not treat sugarcane within ~~30~~ days of harvest. *Revise*
- Do not graze or feed sugarcane fodder and forage to livestock.
- Cultivation and/or fertilizer applications or any other cultural practice that disturbs the root system of targeted weed species may result in less than optimum control when applying ASULAM Liquid Herbicide. These practices are not recommended within 7 day prior to or within 7 days after applications of ASULAM Liquid Herbicide.
- Differences in crop tolerance to ASULAM Liquid Herbicide among sugarcane varieties has been reported in Louisiana. Contact you Local County Agent or University Extension Specialist for further information.

NON-CROPLAND

ASULAM Liquid Herbicide may be used as a post-emergent treatment to control weeds on non-cropland areas such as:

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Boundary fences	Railroad rights-of-way and yards
Fence rows	Storage areas and industrial plant sites
Highway and roadside rights-of-way	Utility rights-of-way and yards
Lumberyards	Warehouse lots
Pipeline rights-of-way	

A surfactant may be added to the spray solution at 0.25% by volume. (Use an approved non-ionic surfactant.)

Apply ASULAM Liquid Herbicide as a water-mix spray for ground applications using 20 to 100 gallons of solution per acre, depending on local practice, to control the following weed species:

WEED SPECIES	SPECIAL INSTRUCTIONS	RATE
Crabgrass (Digitaria spp.)	Apply before the grass reaches seed head formation.	1 gal gal/acre
Johnsongrass (Sorghum halepense)	Apply when the grass is 18 inches or taller. Use the higher rate in well established heavy infestations. For spot treatment in Hawaii, use the higher rate in 100 gallons of solution and apply an amount not to exceed 50 gallons of total solution per acre.	
Paragrass or Californiagrass (Brachiaria mutica or Panicum purpurascens)	Apply before the grass reaches seed head formation. For spot treatment in Hawaii, use the same rate in 100 gallons of solution and apply an amount not to exceed 50 gallons of total solution per acre.	
Western Bracken (Pteridium aquilinum var. pubescens)	Apply when the fern is in full frond.	7 - 8 pints/acre

CHRISTMAS TREE PLANTINGS

ASULAM Liquid Herbicide may be used as a postemergent treatment in Christmas Tree Plantings where Douglas Fir, Grand Fir, ~~Nobel~~ Fir or Scotch Pine are grown. Do not graze or feed foliage from treated areas to livestock.



ASULAM Liquid Herbicide should be applied as a water mix spray. For ground application, use a minimum of 20 gallons of solution per acre; ~~and for aerial application, use a minimum of 10 gallons of solution per acre.~~ Do not use a wetting agent with ASULAM Liquid Herbicide.

WEED SPECIES	SPECIAL INSTRUCTIONS	RATE
Western Bracken (Pteridium aquilinum var. pubescens)	Apply after bud break and hardening or firming of new tree growth. Bracken should be in full frond prior to treatment.	1 gal/acre

TURF - Sod Farms Only

ASULAM Liquid Herbicide can be applied on St. Augustine grass and Tifway 419 Bermuda grass turf. Apply one application per season post-emergence to the weeds listed below. Use 20 to 50 gallons of water per acre in the spray solution.

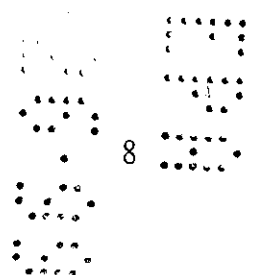
TURF SPECIES	WEED SPECIES	RATE
St. Augustine grass	Bullgrass (Paspalum supinum), Crabgrass (Digitaria spp.), Goosegrass (Eleusine indica)	5 pints/acre
Tifway 419 Bermudagrass	Sandbur (Cenchrus spp.)	

Do not use a surfactant. Do not apply to turf which is under stress or freshly mowed.

ORNAMENTALS

ASULAM Liquid Herbicide can be applied as a single, postemergent, broadcast application on the following ornamentals:

JUNIPERS	YEWS
Juniperus andorra Juniperus chinensis Juniperus conferta Juniperus horizontalis Juniperus litoralis Juniperus sabina	Taxus cuspidata Taxus media Podocarpus macrophyllus



Treatment should be made with a minimum of 20 gallons of water per acre. Do not use a surfactant.

WEED SPECIES	SPECIAL INSTRUCTIONS	RATE
Barnyardgrass (<i>Echinochloa crusgali</i>), Crabgrass (<i>Digitaria</i> spp.), Fall Panicum (<i>Panicum dichotomiflorum</i>), Foxtails (<i>Setaria</i> spp.), Goosegrass (<i>Eleusine indica</i>), Horseweed (marestail) (<i>Conyza canadensis</i>)	Apply when the weeds are between the stages of early seedling and early seed head formation.	1 gal./acre

Local conditions may affect the use of this chemical. Consult State Agricultural Extension or Experiment Station weed specialists for specific recommendations for local weed problems and for information on possible lower dosages.

LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants (a) that this product conforms to the chemical description on the label, (b) that this product is reasonably fit for the purposes set forth in the directions for use when it is used in accordance with such directions, and (c) that the directions, warnings and other statements on this label are based upon responsible experts' evaluation of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants and of residues on food crops and upon reports of field experience. Tests have not been made on all varieties or in all states or under all conditions. THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE ANY OTHER WARRANTIES EXPRESS OR IMPLIED AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

THIS WARRANTY DOES NOT EXTEND TO AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS, WARNINGS OR CAUTIONS.

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