Asulam 36.2 SL

Herbicide

Apply Asulam 36.2 SL for postemergence control of listed weeds in Christmas Tree Plantings, Sugarcane, Turf, Ornamentals and in Non-Cropland Areas

Not intended for use in residential areas. Only for commercial or agricultural use.

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

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

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID	
If on Skin or Clothing:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If in Eyes:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
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 CHEMTREC at 1-800-424-9300 for emergency medical treatment information.	

See inside label booklet for additional Precautionary Statements and Directions for Use including Storage and Disposal instructions.

EPA Reg. No. 83520-29

Manufactured for:
Tacoma Ag, LLC
P.O. Box 14073
Durham, NC 27709

PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if absorbed through skin. Avoid contact with eyes, skin 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 (PPE)

Applicators and other handlers must wear long-sleeved shirt and long pants, chemical-resistant gloves (such as Nitrile, Butyl, Neoprene, and/or Barrier Laminate), and shoes plus socks. 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 STATEMENTS

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 requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should leave the treated 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

This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination. Surface water contamination may occur in areas with poorly draining soils and little or no buffers or in areas where drainage systems flow directly to surface water.

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.
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.

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 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.
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 gloves, and shoes plus socks.

PRODUCT INFORMATION

Do not apply Asulam 36.2 SL through irrigation systems of any type.

SPRAY DRIFT

SENSITIVE AREAS: This herbicide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitats for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR. The interaction of many equipment and weather-related factors determine the potential for spray drift. The applicator is responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulation.

1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed. The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

INFORMATION ON DROPLET SIZE: (This section is advisory in nature and does not supersede the mandatory label requirements)

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions below).

CONTROLLING DROPLET SIZE: (This section is advisory in nature and does not supersede the mandatory label requirements)

- Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of nozzles - Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation - Orienting nozzles so that the spray is released parallel to the airstream, produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

BOOM LENGTH: (This section is advisory in nature and does not supersede the mandatory label requirements)

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

APPLICATION HEIGHT: (This section is advisory in nature and does not supersede the mandatory label requirements)
Applications should not be made at a height greater than 10 feet above the top of the target plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

SWATH ADJUSTMENT: (This section is advisory in nature and does not supersede the mandatory label requirements)
When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator should compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)

WIND: (This section is advisory in nature and does not supersede the mandatory label requirements)
Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **NOTE**: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY: (This section is advisory in nature and does not supersede the mandatory label requirements)
When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

TEMPERATURE INVERSIONS: (This section is advisory in nature and does not supersede the mandatory label requirements)
Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

CHRISTMAS TREE PLANTINGS

Apply Asulam 36.2 SL as a postemergence application in the following species of Christmas Tree Plantings:

- Douglas Fir
- Grand Fir
- Noble Fir
- Scotch Pine

Apply this product as a spray mixture combined with water. Use a minimum of 20 gallons of solution per acre via ground application.

Weed	Rate of Asulam 36.2 SL	Directions
Western Bracken *(Pteridium aquilinum var. pubescens)*	1 gallon per acre	Treat with Asulam 36.2 SL application solution following bud break and after firming/hardening of new tree growth. Prior to application, target species must be in full frond.

Restrictions:

- Do not graze or feed foliage from treated areas to livestock.
- Do not use a wetting agent with Asulam 36.2 SL.
- Do not apply this product via aerial application.
- Apply Asulam 36.2 SL a maximum of once per season.

SUGARCANE

Apply this product as a spray mixture combined with water to sugarcane grown from stubble or plant cane. Only apply Asulam 36.2 SL when weeds are growing actively.

The application of fertilizer and/or some cultivation/cultural practices that disturb the target species root system may lead to sub optimal control of target species. Do not employ practices that will disturb the root system of target species for a minimum of 7 days before application of this product or for a minimum of 7 days after treatment with this product.

IMPORTANT: In Louisiana there have been reports of varying tolerances among crops to applications of Asulam 36.2 SL. For further information, refer to the local County Agent or University Extension Specialist.

In order to enhance weed control in sub-optimal environmental conditions, use one of the following adjuvants:

Adjuvant*	Directions
Crop Oil Concentrate	Must contain 15-20% non-ionic surfactant and 80-85% paraffin based petroleum oil. Apply at the rate of 4 qts./100 gals. (1% V/V) of application mixture.
Non-Ionic Surfactant	Must contain 80% active ingredient minimum. Apply at the rate of 1-2 qts./100 gals. (0.25/0.5% V/V) of application mixture.

*Adjuvants must be cleared for application in growing crops.

Ground Application
Depending on local application practice, apply Asulam 36.2 SL in 15-100 gallons of water per acre.

Aerial Application: Except in Hawaii, apply Asulam 36.2 SL in 3-5 gallons of water per acre.
In Hawaii, apply Asulam 36.2 SL in 5-10 gallons of water per acre.

In order to calculate the correct rate for banded application, use the following formula:

(Band width (in inches) ÷ Row Width (in inches))	x	Broadcast rate (see tables below)	=	Band Rate per acre

Rates for broadcast application of Asulam 36.2 SL for a maximum of one application per season:

Weed	Rate of Asulam 36.2 SL	Directions
Alexandergrass *(Brachiaria plantaginea)*	6-8 Pints per acre	Use the higher rate where the grass is greater than 8 inches in height. Use the lower rate where grass is 6-8 inches in height or less.
Barnyardgrass *(Echinochloa crusgalli*)	6-8 Pints per acre	Use the higher rate where the grass is greater than 8 inches in height. Use the lower rate where grass is 6-8 inches in height or less.
Broadleaf Panicum *(Panicum adspersum)*	6-8 Pints per acre	Use the higher rate where the grass is greater than 8 inches in height. Use the lower rate where grass is 6-8 inches in height or less.
Crabgrass (*Digitaria* spp.)	6-8 Pints per acre	Use the higher rate where the grass has reached the early seed head formation stage. Use the lower rate where grass is yet to reach the seed head formation stage.
Foxtail (*Setaria* spp.)	6-8 Pints per acre	Use the higher rate where the grass is greater than 8 inches in height. Use the lower rate where grass is 6-8 inches in height or less.
Goosegrass *(Eleusine indica*)	6-8 Pints per acre	Use the higher rate where the grass is greater than 8 inches in height. Use the lower rate where grass is 6-8 inches in height or less.
Itchgrass or Raoulgrass *(Rottboellia exaltata)*	8 Pints per acre	Application mixture must be combined with a surfactant. Apply this product when grass is a maximum of 8 inches in height.
Johnsongrass *(Sorghum halepense)*	8 Pints per acre	Apply Asulam 36.2 SL when grass is growing actively and is 12-18 inches in height. At the time of application air temperature must be a minimum of 60°F.
Paragrass or Californiagrass *(Brachiaria mutica* or *Panicum purpurascens)*	8 Pints per acre	Apply this product when grass is a maximum of 6-8 inches in height.

Two applications of Asulam 36.2 SL in one season may be necessary where there are initially heavy infestations of target species, where rhizome Johnsongrass is present or when treating target species that germinate at different times during the growing season.

Rates for broadcast application of Asulam 36.2 SL for two applications per season:

Weed	Application 1: Rate of Asulam 36.2 SL	Application 2: Rate of Asulam 36.2 SL	Directions
Crabgrass (*Digitaria* spp.)	6 to 8 pints per acre	6 to 8 pints per acre	For the 1st and 2nd application, apply to grass before seed head formation.
Itchgrass or Raoulgrass *(Rottboellia exaltata)*	8 pints per acre	8 pints per acre	Application mixture must be combined with a surfactant. For the 1st and 2nd application grass must be a maximum of 8 inches in height.
Johnsongrass *(Sorghum halepense)*	8 pints per acre	8 pints per acre	For the 1st and 2nd application grass must be 12-18 inches in height.

Spot Treatment

Apply Asulam 36.2 SL as a 5% v/v application spray (i.e. 1 gallon of Asulam 36.2 SL per 20 gallons of water).

RESTRICTIONS

- When applying Asulam 36.2 SL as a spot treatment, do not exceed a maximum of 8 pints of this product per acre per application.
- Cover crops may be planted if they are ploughed under and not used for grazing.
- Mainland USA (except Louisiana): do not harvest crops for a minimum of 140 days following application of this product.
- Louisiana: do not harvest crops for a minimum of 100 days following application of this product.
- Hawaii: do not harvest crops for a minimum of 400 days following application of this product.

Do not graze or feed sugarcane fodder to livestock.

NON-CROPLAND

Apply Asulam 36.2 SL for control of listed species as a postemergence application in non-cropland sites, for example, railroad rights-of-way and yards, utility rights-of-way and yards, highway and roadside rights-of-way, pipeline rights-of-ways, storage areas and industrial plant sites, warehouse lots, lumberyards, boundary fences and fence rows.

The application solution of Asulam 36.2 SL may be combined with an approved non-ionic surfactant at a rate of 0.25% by volume.

Prepare this product as a single water mix treatment at a rate of 20-100 gallons of application solution (dependent on local practice) per acre. Apply to the target area as a ground application to control species listed in the table below.

Weed	Rate of Asulam 36.2 SL	Directions
Crabgrass (*Digitaria* spp.)	1 gallon per acre	Treat with Asulam 36.2 SL when grass is yet to reach the seed head formation stage.
Johnsongrass *(Sorghum halepense)*	1 gallon per acre	Treat with Asulam 36.2 SL when grass is a minimum of 18 inches in height. When applying as a spot treatment in Hawaii, apply this product in 100 gallons of solution. Do not exceed 50 gallons total of application solution per acre.
Paragrass or Californiagrass *(Brachiaria mutica* or *Panicum purpurascens)*	1 gallon per acre	Treat with Asulam 36.2 SL when grass is yet to reach the seed head formation stage. When applying as a spot treatment in Hawaii, apply this product in 100 gallons of solution. Do not exceed 50 gallons total of application solution per acre.
Western Bracken *(Pteridium aquilinum* var. *pubescens)*	7-8 pints per acre	Treat with Asulam 36.2 SL when ferns are in full frond.

Restrictions:

- Do not apply this product via aerial application
- Apply Asulam 36.2 SL a maximum of once per season.

TURF (Sod Farms Only)

Apply Asulam 36.2 SL in Tifway 419 Bermudagrass and St. Augustinegrass turf as a postemergence treatment in order to control listed weeds (see table below).

Apply Asulam 36.2 SL as a spray solution in 20-50 gallons of water per acre.

Weed	Rate of Asulam 36.2 SL	Directions
Bullgrass *(Paspalum supinum)*, Crabgrass (*Digitaria* sp.), Goosegrass *(Eleusine indica)*	5 pints per acre	Apply Asulam 36.2 SL in St. Augustinegrass to control listed weed species.
Sandbur (*Cenchrus* sp.)	5 pints per acre	Apply Asulam 36.2 SL in Tifway 419 Bermudagrass to control listed weed species.

Restrictions:

- Apply Asulam 36.2 SL a maximum of once per season.
- Do not combine a surfactant with the application solution of Asulam 36.2 SL.
- Do not treat freshly mown grass or turf that is under stress.

ORNAMENTALS

Apply this product as a single application. Apply as a postemergence broadcast treatment in a minimum of 20 gallons of water per acre. Use Asulam 36.2 SL to treat specified target species in the following ornamental species:

Junipers: *Juniperus Andorra, Juniperus chinensis, Juniperus conferta, Juniperus horizontalis, Juniperus litoralis, Juniperus Sabina*

Yews: *Podocarpus macrophyllus, Taxus cuspidate, Taxus media*

Restrictions:

- Do not combine a surfactant with the application solution of Asulam 36.2 SL.

Weed	Rate of Asulam 36.2 SL	Directions
Barnyardgrass *(Echinochloa crusgali)* Crabgrass (*Digitaria* sp.) Fall Panicum *(Panicum dichotomiflorum)* Foxtails (*Setaria* sp.) Goosegrass *(Eleusine indica)* Horseweed (marestail) *(Conyza Canadensis)*	1 gallon per acre	Apply to listed species between the early seedling stage and the early seed head formation stage.

The use of Asulam 36.2 SL may be affected by local conditions. Refer to Experiment Station and/or State Agricultural weed specialists for information on possible lower dosages and for guidance on local weed problems.

STORAGE AND DISPOSAL

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

STORAGE: Store at temperatures above 32°F. Do not allow product to freeze.

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

CONTAINER HANDLING:

Nonrefillable containers (five gallons or less). Do not reuse or refill this container. Clean container 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 ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a rinse 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 if available, or 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.

Nonrefillable containers (greater than five gallons). Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse or pressure rinse as follows. **Triple rinse:** Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ 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. Then offer for recycling if available, or 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. **Pressure rinse:** 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 flow begins to drip. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

IMPORTANT INFORMATION
READ BEFORE USING PRODUCT

Terms and Conditions of Use

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitations of Remedies.

Warranty Disclaimer

Tacoma Ag, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Tacoma Ag, LLC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Tacoma Ag, LLC or the seller. All such risks shall be assumed by buyer.

Limitation of Remedies

To the extent consistent with applicable law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Tacoma Ag, LLC's election, one of the following: (1) Refund of purchase price paid by buyer or user for product bought, or (2) Replacement of amount of product used.

To the extent consistent with applicable law, Tacoma Ag, LLC shall not be liable for losses or damages resulting from handling or use of this product unless Tacoma Ag, LLC is promptly notified of such loss or damage in writing. In no case, to the extent consistent with applicable law, shall Tacoma Ag, LLC be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer above and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Tacoma Ag, LLC or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

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