U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

NOTICE OF PESTICIDE:
_X_ Registration
___ Reregistration
(under FIFRA, as amended)

EPA Reg. Number:	**Date of Issuance:**
91234-255	12/17/21

Term of Issuance:
Unconditional

Name of Pesticide Product:
A391.01

Name and Address of Registrant (include ZIP Code):

Atticus, LLC
5000 CentreGreen Way, Suite 100
Cary, NC 27513

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 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 unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

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

    - Revise the EPA Registration Number to read, "EPA Reg. No. 91234-255."

Signature of Approving Official:

Shaja B. Joyner, Product Manager 20
Fungicide-Herbicide Branch
Registration Division 7505P

Date:

12/17/21

EPA Form 8570-6

3. Submit one copy of the revised final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 05/14/2021

If you have any questions, please contact Ernest Kraka by phone at (202)-566-2811, or via email at kraka.ernest@epa.gov

Enclosure

{Note to reviewer: [Text] in brackets denotes optional or explanatory language}
{Note to reviewer: {Text} in braces denotes where in the final label text will appear}

{BOOKLET FRONT PANEL LANGUAGE}

CARFENTRAZONE-ETHYL	GROUP	14	HERBICIDE

A391.01[™]

[*Alternate Brand Name:* Quinark EW]

Contains carfentrazone-ethyl, the active ingredient used in [Shark® EW].

[INTENDED FOR AGRICULTURAL OR COMMERCIAL USE ON SPECIFIED LABELED CROPS ONLY]

ACTIVE INGREDIENT:	**(% by weight)**
Carfentrazone-ethyl	21.3%
OTHER INGREDIENTS:	78.7%
TOTAL:	100.0%

This product contains 1.9 pounds active ingredient per gallon.
Contains Petroleum Distillates

KEEP OUT OF REACH OF CHILDREN

CAUTION

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 [below] [inside label booklet] for [additional] [First Aid,] [and] [Precautionary Statements] [and] [Directions for Use].

FIRST AID	
If swallowed:	• Call a poison control center or doctor immediately for treatment advice. • **DO NOT** give any liquid to the person. • **DO NOT** induce vomiting unless told to do so by the poison control center or doctor. • **DO NOT** give anything by mouth to an unconscious person.
If on skin or clothing:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 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 to 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 SafetyCall at **1-844-685-9173** for emergency medical treatment information.	
NOTE TO PHYSICIAN	
Carfentrazone-ethyl is expected to have low oral and dermal toxicity, and moderate inhalation toxicity. It is expected to be slightly irritating to the skin and minimally irritating to the eyes. Treatment is otherwise controlled removal of exposure followed by symptomatic and supportive care. Contains petroleum distillate. Vomiting may cause aspiration pneumonia	

For Chemical Emergency:
Spill, Leak, Fire, Exposure, or Accident,
Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

[A391.01] is not manufactured, or distributed by FMC Corporation, seller of [Shark® EW].

EPA Reg. No.: 91234-XX

EPA Est. No.:

Net Contents:

Manufactured for:
Atticus, LLC
5000 CentreGreen Way, Suite 100
Cary, NC 27513

{LANGUAGE INSIDE BOOKLET}

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed. Harmful if absorbed through skin Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical resistant gloves made of barrier laminate, butyl rubber > 14 mils, nitrile rubber > 14 mils, or viton > 14 mils

USER SAFETY REQUIREMENTS:

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.

USER SAFETY RECOMMENDATIONS

- 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.
- 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

Carfentrazone-ethyl is very toxic to algae and moderately toxic to fish. **DO NOT** apply directly to water, to areas where surface water is present or to intertidal areas below the high water mark, except as specified on this label. **DO NOT** contaminate water when disposing of equipment washwater or rinsate.

For ground water:
Residues of this chemical have properties and characteristics associated with chemicals detected in ground water. Residues of this chemical may leach into ground water if the chemical is used in areas where soils are permeable, particularly where the water table is shallow.

For surface water:
This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features including ponds, streams, and springs will reduce the potential loading of carfentrazone-ethyl residues from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

Fish Advisory Statement:
This product may be hazardous to aquatic organisms, particularly in clear, shallow water bodies that are adjacent to treated areas. Transport to water by runoff or spray drift of this product in areas where surface water is present, or intertidal areas below the mean high water mark, should be avoided. Do not contaminate water when disposing of equipment wash water or rinsate.

Non-target Organism Advisory Statement:
This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by minimizing spray drift.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
DO NOT apply this product 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 regulation.

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.

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, including plants, soil, or water, is: Long sleeve shirt and pants, waterproof gloves, and shoes plus socks.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Re-entry Statement: DO NOT allow people (other than applicator) or pets on treatment area during application. Do not enter treatment area until spray has dried.

PRODUCT INFORMATION

A391.01 is emulsion oil in water formulation. **A391.01** is to be mixed with water, liquid fertilizer or mixtures of water and liquid fertilizer and adjuvants and applied to labeled crops and non-crop areas for selective postemergence control of broadleaf weeds, for sucker control, for burndown prior to planting, as a harvest aid and to defoliate/desiccate labeled crops.
Weed control is optimized when the product is applied to actively growing weeds. **A391.01** is a contact herbicide. Within a few hours following application, the foliage of susceptible weeds show signs of desiccation.
Extremes in environmental conditions including temperature, moisture, soil conditions, and cultural practices may affect the activity of **A391.01** symptoms may be accelerated under moist conditions. Weed control may be reduced when weeds are hardened off by drought and become less susceptible to **A391.01**.
A391.01 is rapidly absorbed through the foliage of plants. To prevent significant crop response, applications must not be made within 6 to 8 hours of either rain or irrigation or when heavy dew is present on the crop. Environmental conditions and with certain spray tank additives may increase herbicidal symptoms on the crop.

Spray Drift Management

Aerial Applications:

- For aerial applications, the distance of the outer most nozzles on the boom must not exceed 75% of the length of the wingspan or 90% of rotor diameter. To further reduce drift, use on half of the length of the wingspan or rotor diameter at the edge of the field.
- Applicators must only spray when wind speed is 10 miles per hour or less.
- Applicators must not spray during temperature inversions.
- For aerial applications, the release height must be no higher than 10 feet from the top of the crop canopy, unless a greater application height is required for pilot safety.
- For aerial applications, select nozzle and pressure that produce medium to coarse spray droplets as indicated in nozzle manufacturer's catalogues and in accordance with ASABE Standard 572.1**.**

Ground Boom Applications

- For ground boom applications, apply with the nozzle height no more than 4 feet above the ground or crop canopy. For all other ground applications, the nozzle must be no more than 4 feet from the target vegetation.
- For ground applications, select nozzle and pressure that produce medium to coarse spray droplets as indicated in nozzle manufacturer's catalogues and in accordance with ASABE Standard 572.1.

Spray Drift Advisories

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER.

Carfentrazone-ethyl is a contact herbicide. Avoid any drift conditions that would allow the product to contact desirable vegetation. Carfentrazone-ethyl is not volatile; however, mist from spray drift may cause injury to sensitive plants.

The interaction of equipment and weather related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target movement from applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses, or to applications of dry materials. Where states have more stringent regulations, they must be observed.

Information on droplet size

The most effective way to reduce drift potential is to apply large droplets. The optimum 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 when applications are made improperly, or under unfavorable environmental conditions (See Wind, Temperature and Humidity, and Temperature Inversions).

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

For all non-aerial applications, wind speed must be measured adjacent to the application site, on the upwind side, immediately prior to application.

Controlling Spray Droplet Size

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows usually produce larger droplets.
- **Pressure** - Do not use pressures greater than that specified by the nozzle manufacturer. 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 – For aerial application, orient nozzles so that the spray is released parallel to the airstream. A parallel orientation results in larger droplets than other orientations and reduces air turbulence and the production of small droplets. 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. For aerial applications, solid stream nozzles oriented straight back produce the largest droplets and potentially the least drift.

Boom Length - For some aerial 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 – Making applications at the lowest height that is safe reduces exposure of spray droplets to evaporation and wind movement. Aerial 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.
Swath Adjustment - Swath adjustment distance must increase, with increasing drift potential (higher wind, smaller drops, etc.).

Drift Reduction Technology (DRT) - The EPA Drift Reduction Technology (DRT) Program was developed to encourage the manufacture, marketing, and use of spray technologies scientifically verified to significantly reduce pesticide drift. The use of DRTs should result in significantly less pesticide from spray applications drifting and being deposited in areas not targeted by those applications, compared to spray technologies that do not meet the minimum DRT standard. EPA-verified drift reduction technologies (DRTs) and their ratings will be added to the following webpage as they become available:
https://www.epa.gov/reducing-pesticide-drift/epa-verified-and-rated-driftreduction-technologies

Wind - Drift potential is lowest between winds speeds of 3 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. Applications shall be avoided below 3 mph due to variable wind direction and high inversion potential. Do not apply Carfentrazone-ethyl when wind speed exceeds 10 mph. NOTE: Local terrain can influence wind patterns. Every applicator shall be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity - 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 – Do not apply carfentrazone-ethyl during a temperature inversion because the 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 following 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.

Shielded Sprayers - Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

Sensitive Areas – Carfentrazone-ethyl shall only be applied when the wind is blowing away from adjacent sensitive areas (e.g. residential areas, bodies of water, known habitats for threatened or endangered species and non-target crops).

TANK MIXTURES

A391.01 may be tank-mixed with other registered herbicides for controlling broader spectrum weeds Refer to this and other products' labels for mixing instructions, precautions, and restrictions. Follow the most restrictive instructions for each tank mix partner. When preparing a new tank mix conduct an appropriate compatibility test by mixing proportional amounts of all spray ingredients in a test vessel (jar) prior to tank mixing with other products. Shake the mixture vigorously and allow it to stand for five to ten minutes. Rapid precipitation of the ingredients and failure to re-suspend when shaken indicates that the mixture is

incompatible and must not be applied. Provided the jar test indicates the mixture to be compatible, prepare the tank mixture as follows: Fill the tank one fourth full with water. With the agitator operating, add the advised amounts of ingredients using the following order: dry granules first and liquid suspensions (flowables) second. As the agitation continues and the tank is filled with water add emulsifiable concentrate products third followed by the addition of water soluble products.

ADJUVANT USE REQUIREMENTS

The use of a quality spray adjuvant is required for optimum performance. Refer to the individual crop sections of this label for specific adjuvant type and use rates.

ON-FARM TESTING

Not all varieties or cultivars of labeled crops have been fully evaluated under all environmental and soil conditions. Consult with your local seed company for additional information. It may also be beneficial to conduct small on-farm trials under actual conditions with specific varieties or cultivars before treating large acreage.

MIXING INFORMATION

Mixing and Loading Instructions

Start by filling the tank with ¾ of the desired volume of clean water and, with agitation, add the proper amount of **A391.01** Complete filling the spray tank to the desired volume. Maintain sufficient agitation to keep materials in solution during both mixing and application and until the spray tank has been emptied. For tank mixtures, follow your local extension guidelines for mixing order. General guidelines are: add dry materials first and agitate until mixed; then 6 EW or water soluble liquids; then EC formulations; then, add adjuvants last. Ensure the compatibility of other products and/or liquid fertilizers with **A391.01** before mixing them together in the spray tank.

Mixing Precautions

Avoid the overnight storage of **A391.01** spray mixtures. If spray solution is stored overnight or longer, thoroughly agitate spray mixture before applying the solution. Premixing **A391.01** spray solutions in nurse tanks is not advised. Maintain continuous and adequate spray solution agitation until all the spray solution has been used. **DO NOT** use with tank additives that alter the pH of the spray solution below pH 5 or above pH 8. Buffer spray solution to alter the pH range as appropriate.

SPRAY EQUIPMENT CLEAN-OUT

Many new pesticides are very active at low rates, especially to sensitive crops. Residues left in mixing equipment, spray tanks, hoses, spray booms and nozzles can cause crop effects if they are not properly cleaned. As soon as possible after spraying **A391.01** and before using the sprayer equipment for any other applications, the sprayer equipment must be thoroughly cleaned using the following procedure. In addition, users must take appropriate steps to ensure proper equipment clean-out for any other products mixed with **A391.01** as required on the other product labels. More complete cleaning can be achieved if the spray system is cleaned immediately following the application.

1. Drain sprayer tank, hoses, spray boom and spray nozzles. Use a high-pressure detergent wash to remove physical sediment and residues from the inside of the sprayer tank and thoroughly rinse. Then, thoroughly flush sprayer hoses, spray boom and spray nozzles with a clean water rinse. Remove and clean spray tips and all filters and screens (tank, spray hose and spray tips) separately in the ammonia solution of Step 2.
2. Next, prepare a sprayer cleaning solution by adding three gallons of ammonia (containing at least 3% active) per 100 gallons of clean water. Prepare sufficient cleaning solution to allow the operation of the spray system for a minimum of 15 minutes to thoroughly flush hoses, spray boom and spray nozzles.
3. Convenient and thorough cleaning of the sprayer can be achieved if the ammonia solution or fresh water is left in the spray tank, hoses, spray booms and spray nozzles overnight or during storage.
4. Before using the sprayer, completely drain the sprayer system. Rinse the tank with clean water and flush through the hoses, spray boom, and spray nozzles with clean water.
5. Properly dispose of all cleaning solution and rinsate in accordance with Federal, State, and local regulations and guidelines.

DO NOT apply sprayer cleaning solutions or rinsate to sensitive crops.

DO NOT store the sprayer overnight or for any extended period of time with **A391.01** spray solution remaining in the tank, spray lines, spray boom plumbing, spray nozzles or strainers.

If the sprayer has been stored or idle, purge the spray boom and nozzles with clean water before beginning any application. Should small quantities of **A391.01** remain in inadequately cleaned mixing, loading and/or spray equipment, they may be released during subsequent applications potentially causing effects to certain crops and other vegetation. FMC accepts no liability for any effects due to inadequately cleaned equipment.

APPLICATION METHODS

GROUND APPLICATION

Use ground sprayers designed, calibrated and operated to deliver uniform spray droplets to the targeted plant or plant parts. Adjust sprayer nozzles to achieve uniform plant coverage. Overlaps and slower ground speeds (caused by continuing to spray while starting, stopping or turning) may result in higher application rates and possible crop response.

Spray Buffer for Ground Application

Spray buffer zones for ground applications, listed in chart below, are required near desirable perennial vegetation or crops before blossom and after total leaf drop, and/or near other desirable or annual crops.

Buffers For Ground Application		
A391.01 USE RATE (lbs ai per acre)	**Low Spray Boom Buffer (ft)**	**High Spray Boom Buffer (ft)**
0.024	20	33
0.031	26	46

Broadcast Boom Sprayers

Use a broadcast boom sprayer equipped with the appropriate nozzles, spray tips and screens and adjusted to provide optimum spray distribution and coverage at the appropriate operating pressures. Use nozzles that produce minimal amounts of fine spray droplets. **DO NOT** exceed 30 psi spray pressure unless otherwise required by the manufacturer of drift reducing nozzles. Apply a minimum of 10 gallons of finished spray per acre. Use higher spray volumes when there is a dense weed population or crop canopy. Adjust sprayers to position spray tips no lower than 12-18 inches above the crop or weed canopy depending on the nozzle specification. Operate the sprayer to avoid the application of high herbicide rates directly over the rows or into the whorl of treated crop plants.

Directed Sprayers

For directed sprayers apply **A391.01** with drop nozzles or other post directed spray equipment.

Post-Directed Applications

Post-directed applications may be utilized when labeled crops have reached minimum growth stages where sprays may be directed to the target weeds, but is not deposited on the green stem, foliage, blooms or fruit of the crop. **DO NOT** apply when conditions favor drift or when wind speed is above 10 mph.

Use drop nozzles or other spray equipment capable of directing the spray to target weeds and away from sensitive plant parts. Apply when labeled crops have reached minimum growth stages described in specific crop sections of this label and when spray will not be deposited on green stems, foliage, blossoms or fruit.

Hooded Sprayers

To apply **A391.01** using a hooded sprayer, refer to the Hooded Sprayer Section for specific adjustment and operation instructions. For additional information, refer to the individual crop sections of this label.

Hand held or high volume orchard gun sprayers

A391.01 may be applied to certain labeled crops and non-crop areas with hand operated sprayers including backpack sprayers, compression sprayers, knapsack sprayers, or high volume orchard gun sprayers. Directed applications may be utilized when labeled crops have reached minimum growth stages where sprays may be directed to the target weeds, but is not deposited on the green stem, foliage, blooms or fruit of the crop. Refer to individual crop sections of this label.

AERIAL APPLICATION

Use nozzle types and arrangements that will provide optimum coverage while producing a minimal amount of fine droplets. Apply at a minimum of 3 gallons of finished spray per acre. Spray volumes greater than 3 GPA may be needed for harvest aid and defoliation treatments, or for dense weed populations or with heavy crop canopies.

For Aerial Application in California:
Refer to individual crop sections to see if A391.01 application is permitted by air
For applications near desirable perennial vegetation or crops before blossom and after total leaf drop, and/or near other desirable or annual crops:

- **DO NOT** apply within 100 feet of all desirable vegetation or crops.
- If wind up to 10 miles per hour is blowing toward desirable vegetation or crops, **DO NOT** apply within 500 feet of the desirable vegetation or crops.
- **DO NOT** apply when winds are in excess of 10 mph or when inversion conditions exist.

SPRAY DRIFT MANAGEMENT

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER.
A391.01 is a contact PPO herbicide. Avoid any drift conditions that would allow the product to contact desirable vegetation.
A391.01 is not volatile, however; mist from spray drift may cause injury to sensitive plants.
The interaction of equipment and weather related factors determine the potential for spray drift.
The applicator and the grower are responsible for considering all these factors when making decisions.
The following drift management requirements must be followed to avoid off-target movement from applications to agricultural field crops. These requirements **DO NOT** apply to forestry applications, public health uses or to applications of dry materials.
Where states have more stringent regulations, they must be observed.

Information on droplet size
The most effective way to reduce drift potential is to apply large droplets. The optimum 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 when applications are made improperly, or under unfavorable environmental conditions (See Wind, Temperature and Humidity, and Temperature Inversions).
All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.
For all non-aerial applications, wind speed must be measured adjacent to the application site, on the upwind side, immediately prior to application.

Controlling Spray Droplet Size

Volume Median Diameter (VMD) – VMD is the expression of the droplet size of the spray cloud. The VMD value means that 50% of the droplets are larger than the expressed value and 50% of the droplets are smaller than the expressed value. Optimum **A391.01** spray clouds must be 450 microns with fewer than 10% of the droplets being 200 microns or less.

Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows usually produce larger droplets.

Pressure - **DO NOT** use pressures greater than that specified by the nozzle manufacturer. 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 – For aerial application, orient nozzles so that the spray is released parallel to the airstream. A parallel orientation results in larger droplets than other orientations and reduces air turbulence and the production of small droplets. 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. For aerial applications, solid stream nozzles oriented straight back produce the largest droplets and potentially the least drift.

Boom Length - For some aerial 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 – Making applications at the lowest height that is safe reduces exposure of spray droplets to evaporation and wind movement. Aerial applications must 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.

Swath Adjustment - Swath adjustment distance must increase, with increasing drift potential (higher wind, smaller drops, etc.).

Wind - Drift potential is lowest between wind speeds of 3 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. Applications shall be avoided below 3 mph due to variable wind direction and high inversion potential. **DO NOT** apply **A391.01** when wind speed exceeds 10 mph. NOTE: Local terrain can influence wind patterns. Every applicator shall be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity - 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 – **DO NOT** apply **A391.01** during a temperature inversion because the 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 following 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.

Sensitive Areas – A391.01 shall only be applied when the wind is blowing away from adjacent sensitive areas (e.g. residential areas, bodies of water, known habitats for threatened or endangered species and non-target crops).

ALLOWABLE A391.01 USE INFORMATION
Refer to the crop section of this label for specific product use directions.
Table 1:

Maximum Allowable A391.01 Use Per Acre Per Year* for Crop or Subgroup		
Crop Group/Subgroup	**Maximum Rate A391.01 (fl oz/acre) Per Year**	**Maximum Rate A391.01 (lb ai/acre) Per Year**
Alfalfa and Clover (Group 18)	2.5	0.04
Alfalfa and Clover (Group 18), harvest aid only	3.84	0.06
Asparagus	3.84	0.06
Banana	7.9	0.124
Berry, low growing (Subgroup 13-07G)	6.15	0.096
Bushberry (Subgroup 13-07B)	6.15	0.096
Cacao	7.9	0.124
Caneberry (Subgroup 13-07A)	25.6	0.4
Citrus fruit (Group 10-10)	7.9	0.124
Coconut	7.9	0.124
Coffee	7.9	0.124
Corn	2.0	0.031
Cotton	7.9	0.124
Cotton, harvest aid only	3.2	0.05
Date	7.9	0.124

Fig	7.9	0.124
Fruit, small vine climbing – except fuzzy kiwifruit (Subgroup 13-07F)	7.9	0.124
Grass (Group 17)	5.95	0.093
Guayule	7.9	0.124
Herbs and Spices (Group 19)	6.15	0.096
Hops	7.7	0.12
Horseradish	6.15	0.096
Indian Mulberry	7.9	0.124
Kiwifruit	7.9	0.124
Mint	1.92	0.030
Nut, Tree (Group 14-12)	7.9	0.124
Oil Seed – except cottonseed (Group 20)	6.15	0.096
Olive	7.9	0.124
Palm Heart	7.9	0.124
Peanut	6.15	0.096
Peanut (harvest aid)	2.0	0.031
Persimmon	7.9	0.124
Pome fruit (Group 11-10)	7.9	0.124
Pomegranate	7.9	0.124
Rice (in California only)	19.2	0.3
Rice (Southern use only) (not permitted in California)	8.8	0.138
Rice, harvest aid only, (not permitted in California)	1.5	0.023
Small Grains	1.0	0.016
Sorghum (harvest aid)	1.0	0.016
Sorghum (grown for seed and grain)	1.0	0.016
Soybeans (preplant, in-season and harvest aid)	1.5	0.023
Stone fruit (Group 12-12)	7.9	0.124
Sugarcane	6.15	0.096
Sugarcane (harvest aid)	2.0	0.031
Tea	7.9	0.124
Teff[1]	2.0	0.031
Tobacco	3.2	0.05
Tropical fruit Trees	6.15	0.096
Vanilla	7.9	0.124
Vegetable, brassica (Group 5)	6.15	0.096
Vegetable, bulb (Group 3-07)	6.15	0.096
Vegetable, cucurbit (Group 9)	6.15	0.096
Vegetable, foliage of legume (Group 7)	6.15	0.096
Vegetable, fruiting (Group 8-10)	6.15	0.096
Vegetable, leafy (except Brassica) (Group 4)	6.15	0.096
Vegetable, leaves of root and tuber (Group 2)	6.15	0.096
Vegetable, legume (Group 6 – except soybean)	6.15	0.096
Vegetable, root (Subgroups 1A and 1B)	6.15	0.096
Vegetable, tuberous and corm (Subgroups 1C and 1D)	11.6	0.181
Wild Rice[1]	19.2	0.3

*The total allowable usage includes all applications made to the field per calendar year. This includes fallow treatments, burndown treatments and all in-season treatments, including harvest aid.

[[1]Not for Use in California]

PREHARVEST INTERVALS

Refer to the crop section of this label for specific product use directions.

Table 2:

Preharvest Intervals (PHI) or Maximum Growth Stage for A391.01 Applications	
Crop Group/Subgroup	**PHI (Days Before Harvest) or Growth Stage**
Alfalfa and Clover (Group 18) grown for Forage and /or Hay	21
Alfalfa and Clover (Group 18) grown for Seed	3
Asparagus	5
Banana	3
Berry, low growing (Subgroup 13-07G)	0
Bushberry (Subgroup 13-07B)	0
Cacao	3
Caneberry (Subgroup 13-07A)	15
Citrus fruit (Group 10-10)	3
Coconut	3
Coffee	3
Corn	14 Leaf Collars
Corn, Sweet corn grown for seed, popcorn, field corn (harvest aid)	3
Cotton (harvest aid)	7
Cotton (preplant and in-season)	7
Date	3
Fruit, small vine climbing – except fuzzy kiwifruit (Subgroup 13-07F)	3
Fig	3
Grass (Group 17)	0
Guayule	3
Herbs and Spices (Group 19)	0
Hops	7
Horseradish	0
Indian Mulberry	3
Kiwifruit	3
Mint	5
Nut, Tree (Group 14-12)	3
Oil Seeds (Group 20 – except cottonseed)	0
Olive	3
Palm Heart	3
Peanut	7
Persimmon	3
Pome fruit (Group 11-10)	3
Pomegranate	3
Rice (In California only)	60
Rice (Southern use only) (not permitted in California)	60
Rice, harvest aid only (not permitted in California)	3
Small Grains (Except winter wheat)	Jointing Stage
Small Grains (harvest aid) – include Winter Wheat	7
Sorghum (harvest aid)	3
Sorghum (grown for seed and grain)	14 Leaf Collars Stage

Soybean (harvest aid)	3
Soybeans (preplant and in-season)	V10
Stone fruit (Group 12-12)	3
Sugarcane	7
Tea	3
Teff[1]	Jointing Stage
Teff (forage – harvest aid) [1]	7
Teff (grain - harvest aid)[1]	3
Tobacco	6
Tropical fruit	0
Vanilla	3
Vegetable, Brassica (Group 5)	0
Vegetable, bulb (Group 3-07)	0
Vegetable, cucurbit (Group 9)	0
Vegetable, foliage of legume (Group 7)	0
Vegetable, fruiting (Group 8-10)	0
Vegetable, leafy except brassica (Group 4)	0
Vegetable, leaves of root and tuber (Group 2)	0
Vegetable, legume (Group 6 – except soybeans)	0
Vegetable, root (Subgroups 1A and 1B)	0
Vegetable, tuberous and corm (Subgroups 1C and 1D)	7
Wild Rice[1]	60

[1Not for Use in California]

CROP ROTATIONAL RESTRICTIONS

Following an application of A391.01, a treated field may be rotated to a registered crop at any time, subject to specific crop restrictions that may be found in the individual crop sections. All other crops may be planted after 12 months.

WEED CONTROL

When used as directed, A391.01 will provide control of the listed weeds up to four (4) inches in height, or as specified.

Table 3:

Weeds Controlled	**A391.01 Use Rate fl oz (pound active ingredient) per acre**
Lambsquarters, common (up to 3 inches tall)	0.5 fl oz (0.008 pound active ingredient) per acre
Morningglory, ivyleaf (up to 3 leaves)	
Morningglory, pitted (up to 3 leaves)	
Nightshade, Eastern black	
Pigweed, redroot	
Velvetleaf	
Waterhemp (up to 2 inches tall)	
Weeds Controlled	**A391.01 Use Rate fl oz (pound active ingredient) per acre)**
All the weeds controlled at 0.5 fl oz (0.008 pound active) per acre plus the weeds listed below:	**0.8 fl oz (0.013 pound active ingredient) per acre**
Cheeseweed	
Filaree, redstem	
Flixweed	
Lambsquarters, common	
Mallow, common	

Morningglory, entireleaf	
Morningglory, ivyleaf	
Morningglory, pitted	
Morningglory, scarlet	
Nightshade, hairy	
Pennycress, field	
Pigweed, prostrate	
Pigweed, smooth	
Pigweed, tumble	
Purslane, common	
Sesbania, hemp	
Smartweed, PA (seedling)	
Spurge, prostrate	
Tansymustard	
Velvetleaf (24")	
Waterhemp, common & tall	
Weeds Controlled	**A391.01 Use Rate fl oz (pound active ingredient) per acre**
All the weeds controlled at 0.8 fl oz (0.013 pound active) per acre plus the weeds listed below:	**1.0 fl oz (0.016 pound active ingredient) per acre**
Amaranth, spiny	
Anoda, spurred	
Bedstraw, catchweed	
Buffalobur	
Carpetweed	
Cocklebur	
Copperleaf, hophornbeam	
Cotton, GMO Varieties	
Cotton, volunteer	
Eclipta	
Fiddleneck, coast	
Groundcherry, smooth (seedling)	
Groundcherry, Wright's	
Jimsonweed	
Kochia	
Lettuce, Prickly 2-3 leaf	
Nettle, burning	
Nightshade, American black	
Nightshade, black	
Rocket, London	
Shepherdspurse	
Speedwell, Virginia	
Spiderwort, tropical	
Thistle, Russian (up to 2 inches tall)	
Wallflower, bushy	

Weeds Controlled	A391.01 Use Rate fl oz (pound active ingredient) per acre
All the weeds controlled at 1.1 fl oz (0.016 pound active) per acre plus the weeds listed below:	**1.6 fl oz (0.025 pound active ingredient) per acre**
Amaranth, Palmer	
Corn Spurry	
Filaree, broadleaf	
Filaree, white	
Lettuce, prickly	
Mallow, Venice (up to 2 inches tall)	
Meadowfoam	
Redmaids	

Burndown of top growth

Weed List	A391.01 Use Rate fl oz (pound active ingredient) per acre
Bindweed, field	**1.0 - 2.0 fl oz (0.016 – 0.032 pound active ingredient) per acre**
Burclover	
Dayflower	
Sage, lanceleaf	
Sowthistle	

AGRICULTURE FARM AND FARMSTEAD USE – NON-CROP

A391.01 may be used for general broadleaf weed control on farms and farmsteads in areas outside of crop growing areas. See the rate and weed table to determine the proper rate for areas including grass waterways, field edges, terraces, equipment storage areas, shelter belts, fence lines, farm buildings, dry ditch, canal banks etc. **A391.01** is a contact herbicide and coverage is essential for good weed control. **A391.01** will control emerged weeds only. Weeds that germinate after application will require repeat treatments.

Precautions

Extreme caution must be used to avoid contact with desirable vegetation. **DO NOT** spray or allow spray mist of **A391.01** to come in contact with green stem tissue, foliage, blooms or desirable fruit.

BOOM EQUIPMENT

Apply **A391.01** at up to 2.0 fl oz (0.031 pound active ingredient) per acre.

Adjuvant Requirements

A nonionic surfactant crop oil concentrate or methylated seed oil is required. Use a nonionic surfactant (NIS) at 0.25% v/v (2 pints per 100 gallons of spray solution) having at least 80% active ingredient or a petroleum or oil seed based crop oil concentrate (COC) at 1.5 to 2 % v/v (1.5 to 2.0 gallons per 100 gallons of spray solution) or a methylated seed oil (MSO). A high quality sprayable liquid nitrogen fertilizer at 2 to 4 % v/v (2 to 4 gallons per 100 gallons) or ammonium sulfate at 2 to 4 pounds per acre in addition to the selected NIS, MSO or COC is allowed.

Tank Mixes for Boom Equipment

A391.01 may be mixed with other herbicides labeled for this method of application in non-crop areas for broader spectrum weed control. See Mixing and Loading Instructions under the PRODUCT INFORMATION section of this label for specific mixing instructions. Refer to this and the other products' labels for mixing instructions, precautions, and restrictions. Follow the most

restrictive instructions for each tank-mix partner.

SPOT TREATMENTS (Applications with hand operated sprayer including backpack sprayers, compression sprayers, knapsack sprayers.)

Mix the amount of **A391.01** for the desired percent spray solution from the table below. These mixtures are based on 1 gallon of solution evenly covering 1000 square feet. Applications must be made on a spray-to-wet basis. Spray coverage must be uniform and complete.

Use lower concentrations for small seedling weeds at the 2-3 leaf stage. Higher concentrations are needed for larger weeds up to the 6-leaf stage. Applications beyond the 6-leaf stage may result in only partial control. **A391.01** may be mixed with other labeled herbicides e.g. glyphosate, glufosinate, and paraquat for broader-spectrum weed control.

Table 4:

Amount A391.01					
Desired Volume	**0.5 fl oz/acre**	**0.8 fl oz/acre**	**1.0 fl oz/acre**	**1.6 fl oz/acre**	**2.0 fl oz/acre**
1 Gal	0.4 ml	0.6 ml	0.7 ml	1.1 ml	1.4 ml
5 Gal	1.7 ml	2.7 ml	3.4 ml	5.4 ml	6.8 ml
25 Gal	8.5 ml	13.6 ml	17.0 ml	27.2 ml	34.0 ml

Adjuvant Requirements for Spot Treatments

A nonionic surfactant (NIS), methylated seed oil (MSO) or crop oil concentrate (COC) is required. Use a nonionic surfactant (NIS) at 0.25% v/v having at least 80% active ingredient, or a methylated seed oil (MSO), or crop oil concentrate (COC) (petroleum or seed oil) at 1 to 2% v/v. A high quality sprayable liquid nitrogen fertilizer at 2 to 4 % v/v or ammonium sulfate (AMS) at the rate of .75 to 1.5 ounces per gallon in addition to the nonionic surfactant methylated seed oil or crop oil is allowed.

Table 5:

Adjuvants					
Desired Volume	**NIS**	**COC or MSO**		**Liquid Nitrogen**	
	0.25% v/v	**1.5% v/v**	**2.0% v/v**	**2.0% v/v**	**4.0% v/v**
1 Gal	0.35 fl oz	1.9 fl oz	2.5 fl oz	2.5 fl oz	5.0 fl oz
5 Gal	1.6 fl oz	9.6 fl oz	12.8 fl oz	12.8 fl oz	25.6 fl oz
25 Gal	8.0 fl oz	47 fl oz	2 qt	2 qt	4 qt

PREPLANT BURNDOWN

Apply **A391.01** alone or with other herbicides or liquid fertilizers as a burn-down treatment to control or suppress weeds. **A391.01** is effective as a burndown treatment for crops prior to new plantings. Apply up to 2.0 fl oz **A391.01** (0.031 pound active ingredient) per acre. **DO NOT** exceed the applicable amounts as listed for the specific crop in the MAXIMUM ALLOWABLE **A391.01** USE TABLE 1. For optimum' performance, make applications to actively growing weeds up to 4 inches high or rosettes less than 3 inches across. **Coverage is essential for good control**. Optimum broad-spectrum control of annual and perennial weeds requires a tank mix with a labeled burndown herbicides e.g. glyphosate, glufosinate, paraquat, 2, 4-D, or dicamba.

Apply A391.01 as a burndown treatment no later than one (1) day after planting by seed to any of the following crops. (See specific crop section for other precautions or restrictions)
Alfalfa and Clover (Crop Group 18)
Cereal grains (Crop Group 15)
Grasses (Crop Group 17)
Oil Seed (Crop Group 20 – except cottonseed)

Peanut
Soybean
Sugarcane
Vegetables, legume (succulent or dried) (Crop Group 6)
Vegetable, tuberous and corm (Subgroup 1C)
Apply A391.01 as a burndown treatment no later than one (1) day before transplanting any of the following crops.
Avocado
Banana
Berry, low growing subgroup 13-07G
Cacao
Coconut
Cofee
Date
Fig
Fruit, citrus (Crop Group 10-10)
Fruit, pome (Crop Group 11-10)
Fruit, stone (Crop Group 12-12)
Guayule
Hops
Horseradish
Indian Mulberry
Kiwifruit
Nuts, tree (Crop Group 14-12)
Olive
Palm Heart
Persimmon
Pomegranate
Small Fruit Vine, Climbing – except fuzzy kiwifruit (Subgroup 13-07F)
Tea
Tobacco
Vanilla
For transplants (not seeded) of the following crops
Vegetables, Brassica (Crop Group 5)
Vegetable, cucurbit (Crop Group 9)
Vegetable, fruiting (Crop Group 8-10)
Vegetables, leafy except Brassica (Crop Group 4)
Apply A391.01 as a burndown treatment no later than seven (7) days before planting by seed any of the following crops.
Vegetables, Brassica (Crop Group 5)
Vegetable, cucurbit (Crop Group 9)
Vegetable, fruiting (Crop Group 8-10)
Vegetable, leafy except Brassica (Crop Group 4)
Vegetable, tuberous and corm (Crop Subgroups 1C and 1D)[1]
Apply A391.01 as a burndown treatment no later than thirty (30) days before planting by seed any of the following crops.
Sugarbeet
Vegetable, bulb (Crop Group 3-07)

[1Not for Use in California]

Adjuvant Requirements for Preplant Burndown
A nonionic surfactant crop oil concentrate or methylated seed oil is required. Use a nonionic surfactant (NIS) at 0.25% v/v (2 pints per 100 gallons of spray solution) having at least 80% active ingredient or a petroleum or oil seed based crop oil concentrate (COC) at 1.0 to 2 % v/v (1.0 to 2.0 gallons per 100 gallons of spray solution) or a methylated seed oil (MSO). A high quality sprayable liquid nitrogen fertilizer at 2 to 4 % v/v (2 to 4 gallons per 100 gallons) or ammonium sulfate at 2 to 4 pounds per acre in addition to the selected NIS, MSO or COC is allowed.

A391.01 Plus Glyphosate or Glufosinate
Apply **A391.01** up to 2.0 fl oz (0.031 pound active ingredient) per acre in combination with glyphosate or glufosinate products at their labeled rates for increased speed of activity and improved control of weeds listed below.

When applied as directed, A391.01 plus labeled herbicides including glyphosate, glufosinate, or paraquat will provide increased speed of activity and improved control of weeds listed below in Table 6 plus the weeds listed in Table 3 for the rate of A391.01 used.

Table 6:

Buttercup, smallflower	Morningglory, spp.
Chickweed	Pennycress, field
Curled Dock	Prostrate knotweed
Cutleaf Evening Primrose	Purslane, common
Bindweed, field	Smartweed, PA
Dandelion, common	Star-of-Bethleham
*Fleabane	Shepherdspurse
Groundsel	Tansymustard
Henbit	Thistle, Russian
Kochia	Thistles, annual & biennial
Lambsquarters, common	Wild buckwheat
*Marestail	Wild hemp

*glyphosate susceptible marestail and fleabane

When tank mixing with fertilizer solutions, be sure to prepare an A391.01 premixture of A391.01 and clean water.
For other specific mixing instructions, refer to the Mixing and Loading Instructions under the **PRODUCT INFORMATION** section.

HOODED SPRAYER APPLICATIONS
Apply **A391.01** to the row middles of the following emerged crops using hooded sprayers to control labeled weeds between the rows of the below listed emerged crops. This treatment is for crops grown in rows, and includes crops grown in rows where mulch or plastic barriers are used as a weed control tool in the drill or plant line.

Hooded sprayers must be designed, adjusted and operated in such a manner to totally enclose the spray pattern and to prevent any spray deposition to green stem tissue, foliage, blooms or fruit of the crop.

Sprayers shall not be operated at more than five (5) miles per hour in order to minimize vertical movement of the sprayer during application, including the bouncing or raising of the equipment. Use extreme care in applying to fields where the soil surface is uneven, has deep furrows, drains or other contours that would disturb the adjustment and positioning of the spray equipment and/or the spray pattern. Applications must not be made when wind conditions may disturb the spray patterns and result in spray deposition to sensitive plants or plant parts.

For optimum performance, make application to actively growing weeds up to 4 inches tall and rosettes less than 3 inches across. **Coverage is essential for good control.**

Crops Labeled for Use with Hooded Sprayers:
Hooded Spray application can be used for all crops listed on this **A391.01** label

Note: **Crop injury will occur when spray is allowed to come in contact with the green stem tissue, leaves, blooms or fruit of the crop.**

See listing for individual commodities contained within the respective Crop groups:

Vegetable, Root and Tuber (Group 1) including: **Arracacha**, Arrowroot, Chinese artichoke, Jerusalem artichoke, Garden Beet, Sugar beet, Edible Burdock, Edible Canna, Carrot; Bitter and Sweet Cassava, Celeriac, Chayote (root), Turnip-rooted Chervil, Chicory, Chufa, Dasheen (taro), Ginger, Ginseng, Horseradish, Leren, Turnip-rooted Parsley, Parsnip, Potato, Radish, Oriental (daikon) Radish, Rutabaga, Salsify, Black Salsify, Spanish Salsify, Skirret, Sweet Potato, Tanier, Turmeric, Turnip, Yam bean; True Yam

Vegetable, leaves of root and tuber (Group 2) including: Garden Beet, Sugar Beet, Edible Burdock, Carrot, Bitter and Sweet Cassava, Celeriac, Chervil, Turnip-rooted, Chicory, Dasheen (taro), Parsnip, Radish, Oriental (daikon) Radish, Rutabaga, Black Salsify, Sweet Potato, Tanier, Turnip, True Yam

Vegetable, bulb (Group 3-07) including: Fresh Leaves Chive**,** Chinese Fresh Leaves Chive, Bulb Daylily, Elegans Hosta; Bulb Fritillaria, Leaves Fritillaria, Bulb Garlic, Great-headed Garlic, Serpent Bulb Garlic, Kurrat; Lady's Leek, Leek, Wild Leek, Bulb Lily, Beltsville Bunching Onion, Bulb Onion, Chinese Bulb Onion, Fresh Onion, Green Onion, Macrostem onion, Pearl onion, Potato Bulb Onion, Tree Tops Onion, Welsh Tops Onion, Bulb Shallot, Fresh Leaves shallot, and cultivars, varieties, and/or hybrids of these

Vegetable, leafy except brassica (Group 4) including: Amaranth (Chinese Spinach), Arugula(Roquette), Cardoon, Celery, Chinese Celery, Celtuce**,** Chervil, Edible-Leaved Chrysanthemum, Garland Chrysanthemum, Corn Salad, Cress, Garden, Upland Cress , Dandelion, Dock (Sorrel),Endive (Escarole), Florence Fennel**,** , Head And Leaf Lettuce, Orach, Parsley, Garden Purslane, Winter Purslane, Radicchio (Red Chicory), Rhubarb, Spinach, New Zealand Spinach, Vine Spinach, Swiss Chard

Vegetable, brassica (Group 5) including: Broccoli; Chinese Broccoli, (gai lon), Broccoli Raab(rapini), Brussels Sprouts, Cabbage, Chinese Cabbage, (bok choy); Chinese Cabbage (napa),Chinese Mustard Cabbage (gai choy), Cauliflower, Cavalo Broccolo, Collards, Kale, Kohlrabi,Mizuna, Mustard Greens, Mustard Spinach, Rape Greens

Vegetable, legume, except soybean (succulent or dried) (Group 6) including: Bean (*Lupinus* spp.) (includes grain lupin, sweet lupin, white lupin, and white sweet lupin); bean (*Phaseolus* spp.) (includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean); bean (*Vigna* spp.) (includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean); broad bean (fava); chickpea (garbanzo); guar; jackbean; lablab bean (hyacinth bean); lentil; pea (*Pisum* spp.) (includes dwarf pea, edible-podded pea, English pea, field pea, garden pea, green pea, snowpea, sugar snap pea); pigeon pea; soybean (immature seed); sword bean

Vegetable, foliage of legume (Group 7) including: Plant parts of any legume vegetable included in the legume vegetables group that will be used as animal feed

Vegetable, fruiting (Group 8-10) including: African eggplant, Bush Tomato, Bell Pepper, Cocona, Currant Tomato, Eggplant, Garden Huckleberry, Goji Berry, Groundcherry, Martynia, Naranjilla, Okra, Pea Eggplant, Pepino, Non-Bell Pepper, Roselle, Scarlet Eggplant, Sunberry, Tomatillo, Tomato, Tree Tomato, and cultivars, varieties, and/or hybrids of these

Vegetable, cucurbit (Group 9) including: Chayote (fruit), Chinese Waxgourd (Chinese Preserving Melon), Citron Melon, Cucumber, Gherkin, Edible Gourd (includes Hyotan, Cucuzza, Hechima, Chinese Okra), Momordica spp. (includes Balsam Apple, Balsam Pear, Bittermelon, Chinese Cucumber), Muskmelon (includes Cantaloupe), Pumpkin, Summer Squash, Winter Squash (includes Butternut Squash, Calabaza, Hubbard Squash, Acorn Squash, Spaghetti Squash), Watermelon

Citrus Fruit (Group 10-10) including: Australian Desert Lime, Australian Finger-Lime, Australian Round Lime, Brown River Finger Lime, Calamondin, Citron, Citrus hybrids, Grapefruit, Japanese Summer Grapefruit, Kumquat, Lemon, Lime, Mediterranean Mandarin, Mount White Lime, New Guinea Wild Lime, Sour Orange; Sweet Orange, Pummelo, Russell River Lime, Satsuma Mandarin, Sweet Lime, Tachibana Orange, Tahiti Lime, Tangelo, Tangerine (mandarin), Tangor, Trifoliate Orange; Uniq Fruit, and cultivars, varieties, and/or hybrids of these

Pome Fruit (Group 11-10) including : Apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties, and/or hybrids of these

Stone Fruit (Group 12-12) including: Apricot, Japanese Apricot, Capulin, Black Cherry, Nanking Cherry, Sweet Cherry, Tart Cherry, Chinese Jujube, Nectarine, Peach, Plum, American Plum, Beach Plum, Canada Plum, Cherry Plum, Chickasaw Plum, Damson Plum, Japanese Plum, Klamath Plum, Prune Plum, Plumcot, Sloe and cultivars, varieties, and/or hybrids of these
Caneberry (subgroup 13-07A) including: Blackberry, Loganberry, Black and Red Raspberry, Wild Raspberry, and cultivars, varieties, and/or hybrids of these

Caneberry (subgroup 13-07A) including: Blackberry, Loganberry, Black and Red Raspberry, Wild Raspberry, and cultivars, varieties, and/or hybrids of these

Bushberry (subgroup 13-07B) including Aronia Berry, Highbush Blueberry, Lowbush Blueberry, Buffalo Currant, Chilean Guava, Highbush Cranberry, Black Currant, Red Currant, Elderberry, European Barberry, Gooseberry, Edible Honeysuckle, Huckleberry, Jostaberry, Juneberry (Saskatoon Berry), Lingonberry, Native Currant, Salal, Sea Buckthorn and cultivars, varieties, and/or hybrids of these

Fruit, small vine climbing – except fuzzy kiwifruit (subgroup13-07F) including: Amur River Grape, Gooseberry, Grape, Hardy Kiwifruit, Maypop, Schisandra Berry and cultivars, varieties, and/or hybrids of these

Berry, low growing (subgroup 13-07G) including: Bearberry, Bilberry, Lowbush Blueberry, Cloudberry, Cranberry, Lingonberry, Muntries, Partridgeberry, Strawberry, and cultivars, varieties, and/or hybrids of these

Tree Nuts (Group 14-12) including: African Nut-Tree, Almond, Beechnut, Brazil Nut; Brazilian Pine, Bunya, Bur Oak, Butternut, Cajou Nut, Candlenut, Cashew, Chestnut, Chinquapin, Coconut, Coquito nut, Dika Nut, Ginkgo, Guiana Chestnut, Hazelnut (filbert); Heartnut, Hickory Nut, Japanese Horse-Chestnut, Macadamia Nut, Mongongo Nut, Monkey-Pot, Monkey Puzzle Nut, Okari Nut, Pachira Nut, Peach Palm Nut, Pecan, Pequi, Pili Nut, Pine Nut, Pistachio, Sapucaia Nut, Tropical Almond, Black Walnut, English Walnut, Yellowhorn and cultivars, varieties, and/or hybrids of these

Cereal Grains (Group 15) including: Barley, Buckwheat, Corn, Millet (Pearl and proso), Oats, Popcorn, Rice, Rye, Sorghum (milo), Teosinte, Triticale, Wheat, and Wild Rice

Forage, fodder and straw of Cereal Grains (Group 16) including forage fodder and straw of all commodities included in the cereal grains (Group 15)

Grasses (Group 17) including: Any grass, Gramineae family (either green or cured) except sugarcane and those included in the cereal grains group, that will be fed to or grazed by livestock, all pasture and range grasses and grasses grown for hay or silage

Non-grass Animal Feed (Group 18) including: Alfalfa, Velvet Bean, Clover (*Trifolium* spp., *Melilotus* spp.), Kudzu, Lespedeza, Lupin, Sainfoin, Trefoil, Vetch, Crown Vetch, Milk Vetch

Herbs and Spices (Group 19) including: Allspice, Angelica, Anise (seed), Star Anise, Annatto (seed), Balm (Lemon Balm), Basil (Fresh and Dried), Borage, Burnet, Camomile, Caper Buds, Caraway, Black Caraway, Cardamom, Cassia Bark, Cassia Buds, Catnip, Celery Seed, Chervil (dried), Chive, Chinese Chive, Cinnamon, Clary, Clove Buds, Coriander Leaf (Cilantro or Chinese Parsley), Coriander Seed (Cilantro), Costmary, Culantro (Leaf), Culantro (Seed), Cumin, Curry (Leaf), Dill (Dillweed), Dill (Seed), Fennel (Common), Florence Fennel (seed), Fenugreek, Grains of Paradise, Horehound, Hyssop, Juniper Berry, Lavender, Lemongrass, Lovage (leaf), Lovage (seed), Mace, Marigold, Marjoram (includes Sweet or Annual Marjoram, Wild Marjoram or Oregano, and Pot Marjoram), Mustard (Seed), Nasturtium, Nutmeg, Parsley (Dried), Pennyroyal, Black Pepper, White Pepper, Poppy (Seed), Rosemary, Rue, Saffron, Sage; Summer and Winter Savory, Sweet Bay, Tansy Tarragon, Thyme, Vanilla, Wintergreen, Woodruff, Wormwood

Oil Seeds (Subgroups 20A & 20B, except Cottonseed) including: Borage, Crambe, Cuphea, Echium, Flax Seed, Gold of Pleasure, Hare's Ear Mustard, Lesquerella, Lunaria, Meadowfoam, Milkweed, Mustard Seed, Oil Radish, Poppy Seed, Rapeseed, Sesame, Sweet Rocket, Calendula, Castor Oil Plant, Chinese Tallowtree, Euphorbia, Evening Primrose, Jojoba, Niger Seed, Rose Hip, Safflower, Stokes Aster, Sunflower, Tallowwood, Tea Oil Plant, Vernonia and cultivars, varieties, and/or hybrids of these

Tropical fruit: including Acerola, Atemoya, Avocado, Biriba, Black Sapote, Canistel, Cherimoya, Custard apple, Feijoa, Guava, Jaboticaba, Llama, Longan, Lychee, Mamey Sapote, Mango, Papaya, Passionfruit, Pawpaw, Pulasan, Rambutan, Sapodilla, Soursop Spanish lime, Star apple, Starfruit, Sugar apple, Wax jambu, Aloe vera, Cactus

APPLICATION INSTRUCTIONS

Alfalfa and Clover (Established Stands Only): Crop Group 18 Non-grass Animal Feed

Methods and Timing	PHI	Target Weeds	Rates	Restrictions
Postemerge Weed Control (Dormant, In- crop, and Stubble)	**DO NOT** apply within 21 days of harvest for stands grown for forage and hay.	Refer to table 3	Apply 0.5-2.5 fl oz (0.008 – 0.04 pounds active ingredient) per acre	**DO NOT** apply more than 2.5 fl ozs (0.04 pounds active ingredient) per acre per application for postemerge weed control applications in nongrass animal feeds.
Harvest Aid	**DO NOT** apply within 21 days of harvest for stands grown for forage and hay. **DO NOT** apply within 3 days of harvest for stands grown for seed.	Refer to table 3	Apply 2.0 to 3.8 fl oz/A (0.031 – 0.06 pounds active ingredient) per acre	**DO NOT** apply more than 2.5 fl ozs. (0.04 pounds active ingredient) per acre per year for postemerge weed control applications in nongrass animal feeds. **DO NOT** make more than 5 application per acre per year when using reduced rates for postemerge weed control in nongrass animal feeds. After an application of this product to crop group

				18 (nongrass animal feed crops), you may only rotate the field to a carfentrazone-ethyl registered crop.

DIRECTIONS FOR USE:

Postemerge Weed Control Treatment

Dormant Season (Fall or Winter Application Postemerge on Weeds)
A391.01 may be applied on dormant crop stubble alone or in combination with other registered herbicides for the post emergence control of weeds in established nongrass animal feed stands during the dormant season (between growing seasons). To control insect pests, **A391.01** may be tank mixed with insecticides, including Mustang Maxx.

Between Cutting In-Season Application (Spring/Summer Applications Postemerge on Weeds)
A391.01 may be applied alone or in combination with other registered herbicides between cuttings (in-season) for the post emergence control of weeds in established crop stands. In-season applications must be made as soon as possible after removal of the previous hay crop and prior to significant regrowth on stems and crowns. Applications may be made from hay removal up to 6 inches of new growth. To control insect pests, **A391.01** may be tank mixed with insecticides, including Mustang Maxx.

A391.01 Use Rates - Postemerge
For optimum results, weeds must be treated when small. Applications must be made in spray volumes sufficient to provide complete coverage of foliage. Use a minimum of 10 gallons of finished spray per acre for ground application equipment, and a minimum of 3 gallons per acre of finished spray for aerial equipment. For optimum results, apply **A391.01** to weeds up to 4 inches tall and rosettes less than 3 inches across. Use a quality nonionic surfactant (NIS) at 0.25% v/v (2 pints per 100 gallons of spray solution) having at least 80% active ingredient. For more active treatments, use a Crop Oil Concentrate (COC) at 0.5 to 1.0% v/v (one half to one gallon per 100 gallons). Some temporary leaf speckling and necrosis may occur on green alfalfa or clover tissue present with between cutting applications, which must be rapidly outgrown under good growing conditions. Adjuvant selection and high moisture environmental conditions will enhance this effect. A high quality sprayable liquid nitrogen fertilizer at 2 to 4 % v/v (2 to 4 gallons per 100 gallons spray solution) or ammonium sulfate (AMS) at the rate of 2 to 4 pounds per acre in addition to the nonionic surfactant methylated seed oil or crop oil is allowed. Coverage is essential for satisfactory performance. Repeat application if necessary. **DO NOT** irrigate just prior to or just after application. Weed control under dry and hot conditions will be improved with COC or similar products.

Tank Mix
For tank mixture applications, refer to the use directions and restrictions of the mixture product. **A391.01** may be tank mixed with other labeled herbicides to control weeds not listed on this label. Read and follow all manufacturers' label directions and label restrictions for the companion herbicide. When tank mixing **A391.01** with other products, be sure **A391.01** is mixed in the spray tank water first.

Harvest Aid Treatment
Apply **A391.01** crops grown for forage, hay or seed alone or as a tank mixture with other harvest aids. Applications shall be made when the crop is mature, or according to Extension Service guidelines in the use area. Apply **A391.01** at 2.0 to 3.8 fl ozs. (0.031 to 0.06 pounds active ingredient) per acre, but not to exceed maximum labeled rates. Refer to the MAXIMUM ALLOWABLE **A391.01** USE RATE CHART and the PREHARVEST INTERVAL charts for additional application information. If treatments of **A391.01** have been made to the crop earlier, that volume must be considered in determining the maximum use rate as a harvest aid treatment

Applications shall be made in spray volumes sufficient to provide complete coverage of foliage. Use a minimum of 10 gallons of finished spray per acre for ground application and 5 gallons per acre for aerial application. A nonionic

surfactant (NIS), methylated seed oil (MSO) or crop oil concentrate (COC) is required. Use a nonionic surfactant (NIS) at 0.25% v/v (2 pints per 100 gallons of spray solution) having at least 80% active ingredient, or a methylated seed oil, or crop oil concentrate (COC)(petroleum or seed oil) at 1 to 2 v/v (1 to 2 gallons per 100 gallons of spray solution). A high quality sprayable liquid nitrogen fertilizer at 2 to 4 % v/v (2 to 4 gallons per 100 gallons spray solution) or ammonium sulfate (AMS) at the rate of 2 to 4 pounds per acre in addition to the nonionic surfactant methylated seed oil or crop oil is allowed. Coverage is essential for satisfactory performance. Repeat application if necessary.

Note
If applied as a tank mixture, refer to the other product's label for restrictions on tank mixing, and observe all label precautions, instructions and rotational cropping restrictions.

ASPARAGUS

Methods and Timing	PHI	Target Weeds	Rates	Restrictions
Postemerge Weed Control	**DO NOT** apply within 5 days of harvest.	Refer to table 3	Apply one to two applications of **A391.01** at 0.5 to 1.92 fl oz (0.008 to 0.031 pound active ingredient) per acre. Use higher rates when Asparagus tissues and weeds are under stress or are larger.	**DO NOT** apply more than 1.92 fl oz (0.031 pound active ingredient) per acre per application. **DO NOT** apply more than 3.84 fl oz (0.06 pound active ingredient) per acre per year. **DO NOT** make more than 2 applications per acre per year. **DO NOT** make applications less than 20 days apart.

DIRECTIONS FOR USE

Apply **A391.01** as a broadcast application after harvest of Asparagus spears for control of broadleaf weeds and new existing Asparagus tissues.

Coverage is essential for good control.

Adjuvant Requirements
Applications shall be made in spray volumes sufficient to provide complete coverage of foliage. Use a minimum of 10 gallons of finished spray per acre for ground application and 5 gallons per acre for aerial application. A nonionic surfactant (NIS), methylated seed oil (MSO) or crop oil concentrate (COC) is required. Use a nonionic surfactant (NIS) at 0.25% v/v (2 pints per 100 gallons of spray solution) having at least 80% active ingredient, or a methylated seed oil, or crop oil concentrate (petroleum or seed oil) at 1 to 2 % v/v (1 to 2 gallons per 100 gallons of spray solution). A high quality sprayable liquid nitrogen fertilizer at 2 to 4 % v/v (2 to 4 gallons per 100 gallons spray solution) or ammonium sulfate (AMS) at the rate of 2 to 4 pounds per acre in addition to the nonionic surfactant, methylated seed oil or crop oil is allowed. Repeat application if necessary.

For specific mixing instructions, refer to the Mixing and Loading Instructions under the PRODUCT INFORMATION section.

BUSHBERRY Subgroup 13-07B

Methods and Timing	PHI	Target Weeds	Rates	Restrictions
Postemerge Weed Control	Can be applied up to harvest	Refer to table 3	Apply up to 2.0 fl oz (0.031 pound active ingredient) per acre.	**DO NOT** apply more than 2.0 fl oz (0.031 lb ai) during the dormant season. **DO NOT** apply more than 6.15 fl oz (0.096 pound active ingredient) per acre per year.

DIRECTIONS FOR USE

A391.01 applications will control susceptible emerged broadleaf weeds. Repeat applications may be necessary for weeds that emerge after an **A391.01** treatment.

Equipment and Application
Apply only by ground equipment including boom sprayers, shielded or hooded sprayers, hand-held or high-volume wands or orchard guns. Use a minimum of 20 gallons finished spray solution per broadcast acre.

Dormant Applications
Apply **A391.01** as a broadcast application to the base of the trunk to control emerged and actively growing weeds during the dormant stage of the crop.

Post-directed Applications for Broadleaf Weed Control
Apply **A391.01** as a directed spray avoiding contact with the berry plant but directed at actively growing weeds. **A391.01** is a contact herbicide and coverage is essential for good weed control. **DO NOT** allow **A391.01** spray mist to come in contact with green stem tissue, desirable fruit, blooms or foliage. Newly planted bush berries must only be treated with shielded sprayers or hooded sprayers.

A391.01 Use Rates
Apply up to 2 fl oz (0.031 pound active ingredient) **A391.01** per broadcast acre. For best control, apply to seedling weeds in the 2 to 3-leaf stage. Use higher labeled rates of **A391.01** for larger weeds up to 6 leaves. Weeds greater than 6 leaves may be only partially controlled. See Table 3 for **A391.01** use rates and weeds controlled.

Adjuvant Requirements
A nonionic surfactant , methylated seed oil (MSO) or crop oil concentrate (COC) is required. Use a nonionic surfactant at 0.25% v/v (2 pints per 100 gallons of spray solution) having at least 80% active ingredient, or a methylated seed oil, or crop oil concentrate (COC) (petroleum or seed oil) at 1 to 2 % v/v (1 to 2 gallons per 100 gallons of spray solution). A high quality sprayable liquid nitrogen fertilizer at 2 to 4 % v/v (2 to 4 gallons per 100
gallons spray solution) or ammonium sulfate (AMS) at the rate of 2 to 4 pounds per acre in addition to the nonionic surfactant methylated seed oil or crop oil is allowed.
A391.01 may be mixed with other registered herbicides for broader-spectrum weed control. When tank mixing with fertilizer solutions, be sure to prepare an **A391.01** premixture of **A391.01** and clean water.
See Mixing and Loading Instructions under the PRODUCT INFORMATION section of this label for specific mixing instructions. Refer to this and the other products' labels for mixing instructions, precautions, and restrictions. Follow the most restrictive instructions for each tank-mix partner.

Precautions
Extreme caution must be taken during applications when desirable fruit, foliage and/or blooms are present in order to avoid spotting or necrosis. **DO NOT** allow **A391.01** spray mist to come in contact with green stem tissue, desirable fruit, blooms or foliage.

For seedling or newly transplanted bushes, **DO NOT** allow spray to contact green bark of trunk area. Use shielded sprayers only.

Band Treatment Application
For band treatment, apply the broadcast equivalent rate and volume per acre. To determine these:

$$\frac{\text{Band Width (inches)}}{\text{Row Width (inches)}} \times \text{Broadcast Rate Per Acre} = \text{Band Rate}$$

$$\frac{\text{Band Width (inches)}}{\text{Row Width (inches)}} \times \text{Broadcast Volume Per Acre} = \text{Band Volume}$$

CANEBERRY (Subgroup 13-07A)

Methods and Timing	PHI	Target Weeds	Rates	Restrictions
Postemerge Weed Control	**DO NOT** apply within 15 days of harvest.	Refer to table 3	Apply 6.4 fl oz **A391.01** (0.1 pound active ingredient) per broadcast acre as a directed spray when weeds and primocanes are approximately 6 inches tall. Apply up to 2 fl oz (0.031 pound active ingredient) **A391.01** per broadcast acre. For best control, apply to actively growing weeds up to 4 inches tall or rosettes less than 3 inches across.	**DO NOT** apply more than 6.4 fl oz (0.1 pound active ingredient) per broadcast acre per application. **DO NOT** apply more than 25.6 fl oz (0.4 pound active ingredient) per acre per year. **DO NOT** make more than 12 applications per acre per year when using reduced application rates. **DO NOT** make applications less than 14 days apart.

DIRECTIONS FOR USE

Equipment and Application
Apply only by ground equipment including boom sprayers, shielded or hooded sprayers, hand-held or high-volume wands or orchard guns. **DO NOT** allow **A391.01** spray mist to come in contact with green stem tissue, desirable fruit, blooms or foliage. **DO NOT** apply when conditions favor drift or when wind is above 10 mph.

Post-Directed Application for Primocane and Weed Control
A391.01 is a contact herbicide for directed application for the control of primocanes and weeds.
Use a minimum of 20 gallons finished spray per broadcast acre at intervals of 14 to 21 days. Direct spray to the bottom 18 inches of the canes and to the soil 24 inches from each side of the plant row. Refer to weed control list in Table 3 for appropriate weed control information.

Adjuvant Requirements
An adjuvant is required. See Adjuvant Requirements below under weed control.

Post-Directed Application for Weed Control
Apply **A391.01** to actively growing weeds. **A391.01** is a contact herbicide and coverage is essential for good weed control. Use a minimum of 20 gallons finished spray solution per acre.

Band Treatment Application
For band treatment, apply the broadcast equivalent rate and volume per acre. To determine these:

Band Width (inches) / Row Width (inches)	X	Broadcast Rate Per Acre	= Band Rate
Band Width (inches) / Row Width (inches)	X	Broadcast Volume Per Acre	= Band Volume

Coverage is essential for good control. Adjuvant Requirements
A nonionic surfactant (NIS), methylated seed oil (MSO) or crop oil concentrate (COC) is required. Use a nonionic surfactant (NIS) at 0.25% v/v (2 pints per 100 gallons of spray solution) having at least 80% active ingredient, or a methylated seed oil, or crop oil concentrate (COC) (petroleum or seed oil) at 1 to 2 % v/v (1 to 2 gallons per 100 gallons of spray solution). A high quality sprayable liquid nitrogen fertilizer at 2 to 4 % v/v (2 to 4 gallons per 100 gallons spray solution) or ammonium sulfate (AMS) at the rate of 2 to 4 pounds per acre in addition to the nonionic surfactant methylated seed oil or crop oil is allowed.

Tank Mix
A391.01 may be mixed with other herbicides registered in caneberries for broader-spectrum weed control.
A391.01 must be the first product added to the spray tank water. See Mixing and Loading Instructions under the PRODUCT INFORMATION section of this label for specific mixing instructions. Refer to this and the other products' labels for mixing instructions, precautions, and restrictions. Follow the most restrictive instructions for each tank-mix partner.

Precautions
Extreme caution must be taken during applications when desirable fruit, foliage and/or blooms are present in order to avoid spotting or necrosis. **DO NOT** allow **A391.01** spray mist to come in contact with green stem tissue, desirable fruit, blooms or foliage.
Newly planted caneberries must only be treated with shielded sprayers or hooded sprayers.

Corn (Field, Seed, Silage, Popcorn, Sweet Corn – Processing and Fresh Market)

Methods and Timing	PHI	Target Weeds	Rates	Restrictions
Preplant Burndown	N/A	Refer to table 3	Apply up to 2.0 fl oz (0.031 pound active ingredient) per acre	**DO NOT** apply more than 2.0 fl oz (0.031 pound active ingredient) per acre per application. **DO NOT** apply more than 2.0 fl oz (0.031 pound active ingredient) per acre per year including all preplant, in-crop, and harvest aid applications. **DO NOT** apply when conditions favor drift or when wind is above 10 miles per hour.
Postemergence (Broadcast)	14 leaf collar	Refer to table 3	Apply up to 1.0 fl oz (0.016 pound active ingredient) per acre	
Postemergence (Hooded Sprayer and Directed Applications)	14 leaf collar	Refer to table 3	Apply up to 2.0 fl oz (0.031 pound active ingredient) per acre	
Harvest Aid	**DO NOT** apply within 3 days of harvest	Refer to table 3	Apply 1.0 to 2.0 fl oz (0.016 to 0.031 pound active ingredient) per acre	

Directions for Use:

Postemergence Weed Control Treatment
Apply **A391.01** alone or as a tank mixture with other herbicides to emerged and actively growing weeds. Apply to corn in all tillage systems from prior to planting up to 14-leaf collar growth stage. When applying **A391.01** to corn greater than V8 stage, utilize drop nozzles aligned between the rows with directed application to reduce contact with the corn foliage and improve contact with the weeds. For optimum performance, make application to actively growing weeds up to 4 inches high and rosettes less than 3 inches across. **Coverage is essential for good control.**

Adjuvant Requirements:
Use a non-ionic surfactant (NIS) at 0.25% v/v (2 pints per 100 gallons of spray solution). Under dry conditions, the use of a crop oil concentrate (COC) at 1.0% v/v may improve weed control. The use of crop oil concentrate can increase leaf speckling and crop response on treated corn leaves.
For specific mixing instructions, refer to the Mixing and Loading Instructions under the PRODUCT INFORMATION section.
Refer to the other product's label for restrictions on tank mixing, and observe all label precautions, instructions, and rotational cropping restrictions. Adjust sprayers to position spray tips no lower than 18 inches above the crop. Operate the sprayer to avoid the application of high herbicide rates directly over the rows and/or into the whorl of the corn plant. Overlaps and slower ground speeds (caused by continuing to spray while starting, stopping or turning) may result in higher application rates and possible crop response.

Broadcast Applications:
Use **A391.01** at 0.5 to 1.0 fl oz (0.008 to 0.16 pound active ingredient) per acre. Use higher rates when weeds are under stress or are larger.
Applications shall be made by ground equipment using a minimum finished spray volume of 10 gallons of spray per acre or by air at a minimum finished spray volume of 3 gallons of spray per acre.
Refer to weed control list in Table 3 for appropriate weed control information.

Tank Mix
A391.01 may be tankmixed with other corn herbicides to control weeds not listed on this label. Read and follow all manufacturers' label directions for the companion herbicides. When tank mixing **A391.01** with

other labeled corn herbicides, use adjuvants as directed by the tank mix partner's label. These may include nonionic surfactant, crop oil concentrate, 28% nitrogen, ammonium sulfate or combinations of these.

A391.01 plus Atrazine

A391.01 may be tank mixed at a rate of 0.5 fl oz (0.008 pound active ingredient) per acre with Atrazine 4L (16 fluid ounces per acre) or Atrazine 90DF (0.6 -1.6 pounds per acre) to control the following weeds:

When used as directed, A391.01 + atrazine will provide control of listed weeds up to 4 inches tall.

Amaranth, Palmer (not triazine resistant)	Copperleaf, hophornbeam	Mallow, Venice	Purslane, common
Amaranth, spiny	Croton, wooly	Morningglory spp.	Sesbania, hemp
Anoda, spurred	Devilsclaw	Nightshade, Eastern black	Thistle, Russian
Buckwheat, wild	Eveningprimrose, cutleaf	Nightshade, hairy	Velvetleaf
Buffalobur	Jimsonweed	Pigweed, redroot	Waterhemp, common
Carpetweed	Kochia *	Pigweed, smooth	Waterhemp, tall
Cocklebur	Lambsquarters, common	Potato, volunteer	Sesbania, hemp

* Kochia control up to 2 inches tall with **A391.01** + Atrazine + COC only. Refer to the Atrazine labels for additional weed listings and for higher use rates.

A391.01 plus Dicamba

A391.01 at 0.5 fl oz (0.008 pound active ingredient) per acre plus 0.25% v/v nonionic surfactant (2 pints per 100 gallons) can be tank mixed with dicamba herbicides (8 -16 fluid ounces per acre) for control of broadleaf weeds including the following:

When used as directed, A391.01 + dicamba will provide control of listed weeds up to 4 inches tall.

Buckwheat, wild	Morningglory, spp.	Potato, volunteer	Thistle, Russian
Cocklebur, common	Nightshade, black	Ragweed, common	Velvetleaf
Jimsonweed	Pigweed, redroot	Ragweed, giant	Waterhemp, common
Kochia	Pigweed, smooth	Smartweed, PA (seedling)	Waterhemp, tall
Lambsquarters	Pigweed, triazine resistant	Sunflower, common	

Refer to the dicamba labels for additional weed listings and for higher use rates. Refer to the Tank Mixture Section for information on potential leaf injury.

A391.01 Plus Atrazine Plus Dicamba or 2,4-D

For the control of additional or certain larger weeds up to 6 inches tall, Atrazine may be added to the tank mixtures of **A391.01** plus dicamba or **A391.01** plus 2,4-D (amine).

Add 2,4-D (amine) to the tank mix at 0.125 to 0.25 pound active ingredient per acre or dicamba at 3 to 8 fluid ounces per acre. Higher rates of atrazine and dicamba herbicides are allowed, but **DO NOT** exceed the specific label use rates allowed by these labels. Add a 0.25% v/v nonionic surfactant (2 pints per 100 gallons) to the tank mixture. Under very dry soil moisture conditions, the use of crop oil concentrate at 1% v/v (1 gallon per

100 gallon spray solution) may improve weed control. The use of crop oil concentrate may increase leaf speckling. Refer to the Tank Mixture section for information on potential leaf injury.

For control of the following weeds up to 6 inches in height, or as specified, add dicamba at 3 to 8 ounces per acre to A391.01 tank mixes with atrazine or to A391.01 tank mixes with other products that allow the use of dicamba on their labels.

Amaranth, Palmer (up to 4 inches)	Nightshade, Eastern black	Smartweeds, annual (seedling)
Amaranth, Spiny (up to 4 inches)	Nightshade, hairy	Sunflower, common (up to 4 inches tall)
Cocklebur, common	Pigweed, redroot	Velvetleaf (up to 24 inches)
Kochia (up to 4 inches tall)	Pigweed, smooth	Waterhemp, common
Lambsquarters, common	Ragweed, common	Waterhemp, tall
Morningglory spp.	Ragweed, giant (up to 4 inches tall)	

Directed Spray Applications:
Apply **A391.01** with drop nozzles between the rows to the target weeds and away from the whorl of the corn plant. Directed spray applications must be used when corn is V8 to V14 stage. Apply **A391.01** up to 2.0 fl oz (0.031 pound active ingredient) per acre. Be aware that weeds growing in and under the dense canopies may not receive adequate spray coverage and may require the use of higher spray volumes for acceptable control. Use appropriate rates of adjuvants including non-ionic surfactant (NIS), crop oil concentrate (COC), or methylated seed oil (MSO).

Hooded Sprayer Applications:
Apply **A391.01** with hooded sprayers to control labeled weeds between the rows of the crop. Refer to the Hooded Sprayer Applications section of this label for additional specific use directions.

Harvest Aid:
Apply 1.0 to 2 fl oz **A391.01** per acre, but not to exceed maximum labeled rates. Refer to the MAXIMUM ALLOWABLE **A391.01** USE RATE and the PREHARVEST INTERVAL Table (Table 2) for additional application information. If treatments of **A391.01** have been made to the crop earlier, that volume must be considered in determining the maximum use rate as a harvest aid treatment. Applications shall be made in spray volumes sufficient to provide complete coverage of foliage. Use a minimum of 15 gallons of finished spray per acre for ground application and 5 gallons per acre for aerial application. A methylated seed oil (MSO) or crop oil concentrate (COC) is required. Use methylated seed oil, or crop oil concentrate (COC) (petroleum or seed oil) at 1 to 2% v/v (1 to 2 gallons per 100 gallons of spray solution). A high quality sprayable liquid nitrogen fertilizer at 2 to 4 % v/v (2 to 4 gallons per 100 gallons spray solution) or ammonium sulfate (AMS) at the rate of 2 to 4 pounds per acre in addition to the methylated seed oil or crop oil is allowed.

Coverage is essential for satisfactory performance

Seed Corn Production:
For seed production fields, apply **A391.01** using drop nozzles or other equipment to make a directed spray treatment. Avoid directing spray solution into the whorl.

Seed corn inbred lines have generally shown good tolerance to **A391.01**. However, all inbred lines have not been tested. Broadcast applications may result in spray being concentrated into the whorl of the plant that will increase leaf response. To minimize application into the whorl of the plants, drop nozzles or other types of directed sprayers must be used to direct the spray to the targeted weeds.

Sweet Corn Precaution:
When applying **A391.01** to sweet corn, broadcast applications may result in spray being concentrated into the whorl of the plant that will increase leaf response. To minimize application into the whorl of the plants,

drop nozzles or other types of directed sprayers must be used to direct the spray to the targeted weeds.

Use only NIS as the spray adjuvant in sweet corn applications.

Application Precautions:
Leaf speckling can occur when **A391.01** is used with certain crop protection products and adjuvants. Refer to the Tank Mixtures and Adjuvants requirements sections under PRODUCT INFORMATION. Bromoxynil mixtures and bentazon mixtures may cause significant crop response when in contact with crop foliage.

Crop Response
The application of **A391.01** to corn may result in temporary crop response including speckling or necrosis of the leaves. Grain yields will not be affected. **DO NOT** make applications when air temperatures are abnormally cool or humidity is high or if the corn foliage is wet from dew, rainfall or irrigation. Users must be aware of these inherent risks and accept these risks prior to application of **A391.01**.

For additional information regarding potential crop response, refer to the PRODUCT INFORMATION section of this label.

Cotton:

Methods and Timing	PHI	Target Weeds	Rates	Restrictions
Removal of Failed Cotton Stands	**DO NOT** apply within 7 days of harvest.	Failed Cotton (up to 3 leaf cotton)	Apply 1.0 to 1.6 fl oz (0.016 – 0.025 pounds active ingredient) per acre	**DO NOT** apply when conditions favor drift or when wind is above 10mph. **DO NOT** apply more than 1.6 fl oz (0.025 pound active ingredient) per acre per application. **DO NOT** apply more than 7.9 fl oz (0.124 pound active ingredient) per acre total for preplant, in-season weed control and harvest aid. **DO NOT** apply more than 3.2 fl oz (0.05 pound active ingredient) per acre total for managed maturity and/or as a harvest aid.
Preplant Burndown	**DO NOT** apply within 7 days of harvest.	Refer to table 3.	Appy up to 1.6 fl oz (0.025 pounds active ingredient) per acre	
Hooded Sprayer	**DO NOT** apply within 7 days of harvest.	Refer to table 3	Apply up to 1.6 fl oz (0.025 pounds active ingredient) per acre	
Post-directed and Lay-by	**DO NOT** apply within 7 days of harvest.	Refer to table 3	Apply up to 1.6 fl oz (0.025 pounds active ingredient) per acre	
Managed Maturity	**DO NOT** apply within 7 days of harvest.	Manage unproductive terminal growth in cotton.	Apply 0.25 to 0.5 fl oz (0.004 – 0.008 pounds active ingredient) per acre	
Defoliation/Harvest Aid	**DO NOT** apply within 7 days of harvest.	Defoliate and desiccate cotton and troublesome weeds	Apply up to 1.6 fl oz (0.025 pounds active ingredient) per acre	

DIRECTIONS FOR USE:

Removal of Failed Cotton Stands
Apply 1.0 to 1.6 fl oz **A391.01** (0.016 to 0.025 pound active ingredient) per acre broadcast as a foliar spray over the top of the remaining cotton plants with sufficient spray volume to provide adequate coverage of the cotton plant, particularly the terminal area. Use higher rates on larger failed cotton. For best results **DO NOT** exceed 3 leaf cotton. **Coverage is essential for good control.**

PREPLANT BURNDOWN
See instructions under the Preplant Burndown section of this label.

Hooded Sprayer Applications
Apply **A391.01** with hooded sprayers to control labeled weeds between the rows of the crop. Refer to the Hooded Sprayer Applications section of this label for additional specific use directions.

Post-directed and Lay-by Applications
A391.01 is a contact herbicide for postemergence directed sprayer or hooded/shielded sprayer applications for the control of broadleaf weeds in cotton. Apply **A391.01** alone or as a tank mixture with other herbicides to emerged and actively growing weeds. For specific mixing instructions, refer to the Mixing and Loading Instructions under the PRODUCT INFORMATION section. Applications of **A391.01** or **A391.01** tank mixes must be made with directed sprayers or hooded sprayers to prevent contact of spray solution with the cotton plant. **DO NOT** allow spray solution to contact cotton foliage, green stem tissue, or blooms. Directed spray equipment must position nozzles a minimum 3 to 4 inches above the soil, with nozzles directed beneath the crop canopy. **A391.01** or **A391.01** tank mix applications shall be made to cotton that is a minimum of 6 inches in height. Applications to cotton at 5 to 6 nodes or less must be made with hooded or shielded sprayer equipment to completely avoid contact with cotton plants. Apply lay-by applications of **A391.01** or **A391.01** tank mixtures at later growth stages of cotton when cotton plants have achieved a height of 12 inches or more with sufficient bark development and height differential between crop
bottom leaves and the soil. Spray solution shall be directed at the base of cotton plants for minimal contact with green stem tissue or foliage while maintaining maximum contact with broadleaf weeds that are at appropriate treatment size. **DO NOT** apply when conditions favoring drift exist or wind is above 10 miles per hour.
For optimum performance, make application to actively growing weeds up to 4 inches tall and rosettes less than 3 inches across. **Coverage is essential for good control.**

Adjuvant
A nonionic surfactant (NIS), methylated seed oil (MSO) or crop oil concentrate (COC) is required. Use a nonionic surfactant (NIS) at 0.25% v/v (2 pints per 100 gallons of spray solution) having at least 80% active ingredient, or a methylated seed oil, or crop oil concentrate (COC)(petroleum or seed oil) at 1 to 2% v/v (1 to 2 gallons per 100 gallons of spray solution). A high quality sprayable liquid nitrogen fertilizer at 2 to 4 % v/v (2 to 4 gallons per 100 gallons spray solution) or ammonium sulfate (AMS) at the rate of 2 to 4 pounds per acre in addition to the nonionic surfactant methylated seed oil or crop oil is allowed.

A391.01 Use Rates and Weeds Controlled
Apply up to 1.6 fl oz (0.025 lb ai/A) **A391.01** as a post-directed treatment using a directed sprayer a hooded sprayer or lay-by sprayer delivering a minimum finished spray volume of 10 gallons per acre. **DO NOT** apply more than 3.2 fl oz (0.05 lb.ai) **A391.01** per season by post-directed and lay-by applications. Refer to weed control list in Table 3 for appropriate weed control information.

For control of additional broadleaf weeds and grasses, **A391.01** may be tank mixed with other herbicides registered for cotton post-directed and/or lay-by applications. Refer to the other product's label for restrictions on tank mixing, and observe all label precautions, instructions and rotational cropping restrictions.

Managed Maturity Application for Cotton
Apply **A391.01** as an aid to remove undesirable top growth and reduce unproductive terminal growth. Use alone or as

a tank mixture with other cotton insecticides and herbicides. Read all product labels and follow all directions and precautions when tank mixing with this product.

Timing
Apply **A391.01** when cotton is actively growing and the plants have 1% to 20% open bolls; with applications at 15% open bolls being optimum. When using the Cotman monitoring program, apply **A391.01** at NAWF5, plus 450 – 650 heat units. Avoid Managed Maturity treatments to fields, or areas of fields, that are stressed.

A391.01 Use Rates – Managed Maturity
Apply **A391.01** as a broadcast spray at 0.25 fl oz per acre (0.004 lb ai per acre) to 0.5 fl oz per acre (0.008 lb ai per acre), targeting 0.375 fl oz per acre (0.006 lb ai per acre) in spray volume adequate to obtain upper canopy coverage of the plant foliage. In situations of extremely lush growth, apply up to 0.5 fl oz per acre (0.008 lb ai per acre). Make applications using a minimum of 10 gallons of finished spray per acre for ground application and a minimum of 5 gallons per acre by air. Good upper canopy coverage is essential for optimum performance.

Use a quality crop oil concentrate (COC) at the specified rate of 1% v/v.

Defoliation / Harvest Aid Application
Apply **A391.01** as a harvest aid to defoliate and desiccate cotton and troublesome weeds that may be present at harvest. Apply **A391.01** alone or as a tank mixture with other cotton harvest aids.
Use a quality spray adjuvant e.g. nonionic surfactant (NIS) or crop oil concentrate (COC) at the specified rates. NIS is the specified adjuvant during warmer periods with COC being the better choice for applications during cooler periods. Make application when 60 to 70 percent of the bolls are open, or according to the State Agricultural Extension Service guidelines in the use area.

Apply up to 1.6 fl oz **A391.01** (up to 0.031 lb ai per acre) in spray volume sufficient to provide complete coverage of cotton foliage. Use a minimum of 10 gallons of finished spray per acre for ground application and 5 gallons per acre for aerial application. **Coverage is essential for good defoliation.** Repeat application if necessary to remove remaining foliage or control regrowth. **DO NOT** apply more than 3.2 fl oz (0.05 pound active ingredient) per acre total as a harvest aid. Dense cotton canopy, large plant size, and environmental conditions not conducive to complete plant coverage may reduce initial application performance and increase the need for a second application.

Apply **A391.01** alone, as a tank mix, or as a sequential application alone or tank mixed with other registered cotton harvest aid products.

Refer to the other product's label for restrictions on tank mixing, and observe all label precautions, instructions and rotational cropping restrictions.

Dried shelled beans, peas (Crop Subgroup 6-C, except soybean), Flax and vegetable foliage of legume vegetables (Crop Group 7)

CROP GROUP	PHI	Target Weeds	Rates	Restrictions
Preplant Burndown	N/A	Refer to table 3	Apply up to 2.0 fl oz (0.031 pound active ingredient) per acre.	**DO NOT** apply more than 2.0 fl oz (0.031 pound active ingredient) per acre per application for preplant burndown. **DO NOT** apply more than 6.15 fl oz (0.096 pound active ingredient) per acre per year.
Harvest Aid Applications	Can be applied up to 0 days before harvest.	Refer to table 3	Apply 1.0 to 6.1 fl oz (0.016 to 0.096 pound active ingredient) per acre.	

Directions for Use:

Preplant Burndown:

Refer to the preplant burn down section of this label.

Harvest AID Treatment:

Apply **A391.01** as a harvest aid to dry beans and dry peas at maturity when 80 to 90% of seed pods are yellow or buck-skin in color and only 30% of green leaves remain on the plant. Apply to flax when 75% of the bolls have turned brown. Thorough coverage is essential forharvest aid and multiple applications may be needed. For optimum performance use 15 to 30 gallons per acre finished sprayed with a methylated seed oil (MSO) type adjuvant to ensure thorough coverage and retention for harvest aid.

A391.01 Use rates:

Apply **A391.01** alone or as a tank mixture with other harvest aids. Apply **A391.01** at 1.0 to 6.1 fl oz (0.016 to 0.096 pounds active ingredient) per acre, but not to exceed maximum labeled rates. Refer to the MAXIMUM ALLOWABLE **A391.01** USE RATE CHART and the PREHARVEST INTERVAL charts for additional application information.

Applications shall be made in spray volumes sufficient to provide complete coverage of foliage. Use a minimum of 15 gallons of finished spray per acre for ground application and 5 gallons per acre for aerial application. A methylated seed oil (MSO) or crop oil concentrate (COC) is required at 1 to 2 % v/v (1 to 2 gallons per 100 gallons of spray solution). The addition of a high quality sprayable liquid nitrogen fertilizer at 2 to 4 % v/v (2 to 4 gallons per 100 gallons spray solution) or ammonium sulfate (AMS) at the rate of 2 to 4 pounds per acre in addition to the methylated seed oil or crop oil may enhance performance. If spraying dry beans before full maturity and pods are not all mature and turning color, a repeat application may be necessary.

Note

If applied as a tank mixture, refer to the other product's label for restrictions on tank mixing, and observe all label precautions, instructions and rotational cropping restrictions.

FALLOW SYSTEMS

CROP GROUP	PHI	Target Weeds	Rates	Restrictions
Emerged Weed Control	**NA**	Refer to table 3	Apply up to 2.0 fl oz (0.031 pound active ingredient) per acre.	For crop planting information following fallow treatments, refer to the preplant burndown for planting interval instructions.

Directions for Use:

Apply **A391.01** by ground or air alone or with other herbicides in the fallow period prior to planting or the emergence of any crop listed on this label to control or suppress weeds. For optimum performance, make applications to actively growing weeds up to 4 inches high or rosettes less than 3 inches across. **Coverage is essential for good weed control.**

A391.01 may be utilized in Fallow Cropping Systems for chemical weed control to aid in moisture conservation between cropping periods.

Adjuvant Requirements
A nonionic surfactant, crop oil concentrate or methylated seed oil is required. Use a nonionic surfactant (NIS) at 0.25% v/v (2 pints per 100 gallons of spray solution) having at least 80% active ingredient or a petroleum or oil-seed based crop oil concentrate (COC) at 1.0 to 2 % v/v (1.0 to 2.0 gallons per 100 gallons of spray solution) or a methylated seed oil (MSO). A high quality sprayable liquid nitrogen fertilizer at 2 to 4 % v/v (2 to 4 gallons per 100 gallons) or ammonium sulfate at 2 to 4 pounds per acre in addition to the selected NIS, MSO or COC is allowed.

Optimum broad-spectrum control of annual and perennial weeds requires a tank mix with a broad- spectrum burndown herbicide including glyphosate, glufosinate or paraquat. Refer to Table 3 for proper use rate for weed spectrum. For specific mixing instructions, refer to the Mixing and Loading Instructions under the PRODUCT INFORMATION section.

Tank Mix
For all products used in tank mixes, refer to the specific product labels for all restrictions on tank mixing and observe all label precautions, instructions and rotational cropping restrictions.

Fruit, small vine climbing - except fuzzy kiwifruit, subgroup 13-07F

Methods and Timing	PHI	Target Weeds	Rates	Restrictions
Postemerge Weed Control	**DO NOT** apply within 3 days of harvest.	Refer to table 3	Apply up to 2.0 fl oz (0.031 pound active ingredient) per acre.	**DO NOT** apply more than 2.0 fl oz (0.031 pound active ingredient) per acre per application (including preplant site preparation treatments). **DO NOT** apply more than 7.9 fl oz (0.124 pound active ingredient) per acre per year. **DO NOT** make applications less than 14 days apart.

DIRECTIONS FOR USE

A391.01 may be applied for postemergence weed control or for sucker control.

Weed Control
Apply **A391.01** alone or as a tank mixture with other herbicides as a postemergence directed spray treatment or as a hooded spray treatment to control emerged and actively growing weeds. Apply **A391.01** at up to 2.0 fl oz (0.031 pound active ingredient) per acre. Apply **A391.01** to middles (between rows of plants) and in strips (in row of plants). Refer to weed control list in Table 3 for appropriate weed control information.
Apply **A391.01** at any time during the season (see precautions). **A391.01** may be mixed with other herbicides that have pre-emergence or post-emergence activity. Any pre- emergence activity must rely on activity from other herbicides as directed on their labels.
Herbicides including glyphosate may be tank mixed with **A391.01** for broader spectrum weed control. If **A391.01** is used in a tank mixture, observe the other product's label for restrictions, precautions and rotational cropping instructions.

Sucker Management
A391.01 is effective as an aid in the management of undesirable sucker growth from the base of vine trunks or root

sprouts. Apply **A391.01** at 2.0 fl oz (0.031 pound active ingredient) per acre. Suckers and other undesirable growth must be treated when the tissue is young and not mature and/or hardened off. Care must be taken not to allow spray mist to contact desirable fruit or foliage or green stem tissue (see precautions). Application of **A391.01** with other sucker control herbicides is allowed.

Hooded Sprayer Applications
Apply **A391.01** with hooded sprayers to control labeled weeds between the rows of the crop. Refer to the **Hooded Sprayer Applications** section of this label for additional specific use directions.

Equipment and Application
Coverage is essential for good control. Use a spray volume adequate to obtain thorough coverage with a minimum of 10 gallons of finished spray per acre. Apply only with ground equipment. Apply **A391.01** with hooded sprayers, boom equipment, shielded sprayers, hand-held and high-volume wands or orchard guns. Always add **A391.01** to the spray tank first. See "Mixing and Loading Instructions" under PRODUCT INFORMATION.

Adjuvant Requirements
Control is enhanced with the addition of a nonionic surfactant (NIS) or crop oil concentrate (COC). Use a quality nonionic surfactant (NIS) containing at least 80% active at 0.25% v/v (2 pints NIS per 100 gallons) or a crop oil concentrate (COC) at 1% v/v (one gallon COC per 100 gallons), or a methylated seed oil (MSO). The use of a high quality sprayable liquid nitrogen fertilizer at 2 to 4% v/v or ammonium sulfate (AMS) used at 2 to 4 pounds per acre in addition to the NIS, or MSO or COC is allowed.

Application Precautions: Extreme caution must be used during applications when desirable fruit or foliage is present in order to avoid fruit spotting or leaf necrosis.

DO NOT allow **A391.01** spray mist to come in contact with desirable fruit, green stem tissue, foliage or blooms.
DO NOT use on seedling or newly transplanted vines. **DO NOT** allow spray to contact green bark of trunk area.

Fruit Tree, Tree Nut and Other Crops

CROP GROUP	PHI	Target Weeds	Rates	Restrictions
Citrus Fruits including Calamondin, Citrus Citron, Chironja, Tangelo, Tangor, Grapefruit, Kumquat, Lemon, Lime, Mandarin (Tangerine), Orange (sour), Orange (Sweet), Pummelo, Satsuma Mandarin	**DO NOT** apply within 3 days of harvest	Refer to table 3	Apply up to 2 fl oz/A (0.031 pound active ingredient) per acre.	**DO NOT** make applications with air-blast sprayers. **DO NOT** make applications less than 14 days apart. **DO NOT** apply more than 2.0 fl oz (0.031 pound active ingredient) per acre per application. **DO NOT** apply more than 7.9 fl oz (0.124 pound active ingredient) per acre per year, including preplant site preparation.

Pome Fruits: including Apple, Crabapple, Loquat, Mayhaw, Pear, Pear (Oriental) and Quince	**DO NOT** apply within 3 days of harvest	Refer to table 3	Apply up to 2.0 fl oz/A (0.031 pound active ingredient) per acre.	**DO NOT** make applications with air-blast sprayers. **DO NOT** make applications less than 14 days apart. **DO NOT** apply more than 2.0 fl oz (0.031 pound active ingredient) per acre per application **DO NOT** apply more than 7.9 fl oz (0.124 pound active ingredient) per acre per year, including preplant site preparation
Stone Fruits: including Apricot, Cherry (Sweet), Cherry (Tart), Nectarine, Peach, Plum, Plum (Chickasaw), Plum (Damson), Plum (Japanese), Prune and Plumcot	**DO NOT** apply within 3 days of harvest	Refer to table 3	Apply up to 2.0 fl oz/A (0.031 pound active ingredient) per acre.	**DO NOT** make applications with air-blast sprayers. **DO NOT** make applications less than 14 days apart. **DO NOT** apply more than 2.0 fl oz (0.031 pound active ingredient) per acre per application. **DO NOT** apply more than 7.9 fl oz (0.124 pound active ingredient) per acre per year, including preplant site preparation.
Tree Nuts: including Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (Hazelnut), Hickory Nut, Macadamia Nut (Bush Nut), Pecan, Pistachio and Walnut (Black and English)	**DO NOT** apply within 3 days of harvest	Refer to table 3	Apply up to 2.0 fl oz/A (0.031 pound active ingredient) per acre.	**DO NOT** make applications with air-blast sprayers. **DO NOT** make applications less than 14 days apart. **DO NOT** apply more than 2.0 fl oz (0.031 pound active ingredient) per acre per application. **DO NOT** apply more than 7.9 fl oz (0.124 pound active ingredient) per acre per year, including preplant site preparation.

Tropical fruit: including Papaya, Avocado, Black Sapote, Canistel, Mamey Sapote, Mango, Sapodilla, Star apple, Guava, Feijoa, Jaboticaba, Wax jambu, Starfruit, Passionfruit, Acerola, Lychee, Longan, Spanish lime, Rambutan, Pulasan, Sugar apple, Atemoya, Custard apple, Cherimoya, Llama, Soursop, and Biriba	Can be applied up to harvest	Refer to table 3	Apply up to 2.0 fl oz/A (0.031 pound active ingredient) per acre.	**DO NOT** make applications with air-blast sprayers. **DO NOT** make applications less than 14 days apart. **DO NOT** apply more than 2 fl oz (0.031 pound active ingredient) per acre in a single application. **DO NOT** apply more than 6.1 fl oz (0.096 pound active ingredient) per acre per year, including preplant site preparation.
Other Crops: including Banana, Cacao, Coconut, Coffee, Date, Fig, Guayule, Indian Mulberry, Olive, Palm Heart, Persimmon, Pomegranate, Tea, and Vanilla	**DO NOT** apply within 3 days of harvest	Refer to table 3	Apply up to 2.0 fl oz/A (0.031 pound active ingredient) per acre.	**DO NOT** make applications with air-blast sprayers. **DO NOT** make applications less than 14 days apart. **DO NOT** apply more than 2.0 fl oz (0.031 pound active ingredient) per acre per application. **DO NOT** apply more than 7.9 fl oz (0.124 pound active ingredient) per acre per year, including preplant site preparation.

DIRECTIONS FOR USE

PRODUCTION SYSTEMS

Different production systems dictate different application techniques. Skirted trees are those allowing the lower branches of the trees to grow to the ground line. Non-skirted trees are grown in production systems where branches are pruned allowing access to the trunk area.

Equipment and Application Skirted Orchards and Groves

Hooded sprayers are required for **A391.01** applications in skirted trees. Refer to the HOODED SPRAYER APPLICATIONS section of this label.

Non-Skirted Orchards and Groves

Apply only by ground equipment including boom sprayers, shielded or hooded sprayers, hand-held or high-volume wands or orchard guns. Use a minimum of 20 gallons finished spray solution per broadcast acre.

Weed Control

Apply **A391.01** alone or as a tank mix with other registered herbicides to actively growing weeds. **A391.01** is a contact herbicide and coverage is essential for good weed control. Use a minimum of 20 gallons finished spray solution per broadcast acre.

DO NOT allow **A391.01** spray solution to contact green stem tissue, leaves, fruit or blooms of trees.

A391.01 Application Rates
Apply **A391.01** up to 2 fl oz (0.031 pound active ingredient) per acre for postemergence control of susceptible broadleaf weeds. Refer to weed control list in Table 3 for appropriate weed control information. For best control, apply to seedling weeds in the 2 to 3-leaf stage. For larger weeds up to 6 leaves, use higher labeled rates of **A391.01**. Weeds greater than 6 leaves may be only partially controlled.

Adjuvant Requirements
Control is enhanced with the addition of a nonionic surfactant (NIS) or crop oil concentrate (COC). Use a nonionic surfactant (NIS) at 0.25% v/v (2 pints NIS per 100 gallons) or a crop oil concentrate at 1% v/v (one gallon COC per 100 gallons). **A391.01** may also be applied with labeled rates of MSO or silicone adjuvants.

A391.01 may be mixed with other herbicides that have preemergence or postemergence activity. **A391.01** only controls emerged vegetation. Any preemergence activity must rely on activity from registered preemergence herbicides mixed with **A391.01**. Contact herbicides e.g. glyphosate, glufosinate, and paraquat may be tank mixed with **A391.01** for broader spectrum weed control. See Mixing and Loading
Instruction s under the PRODUCT INFORMATION section of this label for specific mixing instructions. Refer to this and the other product's labels for mixing instructions, precautions, and restrictions. Follow the most restrictive instructions for each tank-mix partner.

Sucker Management
A391.01 is effective as an aid in the management of undesirable sucker growth from the base of the trunks or root sprouts. Apply **A391.01** at 2 fl oz (0.031 pound active ingredient) per acre. Suckers and other undesirable growth must be treated when the tissue is young and not mature and/or hardened off. Care must be taken not to allow spray mist to contact desirable fruit, foliage or green stem tissue (see Precautions).

Chemical Mowing
Apply **A391.01** alone or in tank mixtures with other herbicides in chemical mowing practices for orchard vegetation management.

Hooded Sprayer Application
Apply **A391.01** with hooded sprayers to control labeled weeds between the rows of the crop. Refer to the **Hooded Sprayer Applications** section of this label for additional specific use directions.

Precautions
Extreme caution must be used during applications when desirable fruit and/or foliage are present in order to avoid fruit spotting and/or leaf necrosis. **DO NOT** allow spray mist of **A391.01** to come in contact with green stem tissue, foliage, blooms or desirable fruit.

On seedling or newly transplanted trees **DO NOT** allow spray to contact green bark of trunk area. For new seedlings up to 2 year old trees, the trunk base must be wrapped to help prevent chemical contact with the bark.

Tank Mix
If **A391.01** is used in a tank mixture, observe the other product's label for restrictions, precautions, and rotational cropping instructions.

Grasses: (Forage, Fodder, Hay, Seed and Sod, Annual canarygrass, foxtail millet)

Methods and Timing	PHI	Target Weeds	Rates	Restrictions
Postemerge Weed Control	When **A391.01** is applied alone, grazing and hay operations may proceed with no restrictions.	Refer to table 3	Apply up to 2.0 fl oz (0.031 pound active ingredient) per acre	**DO NOT** make applications less than 7 days apart. **DO NOT** apply more than 2.0 fl oz (0.031 pound active ingredient) per acre per application. **DO NOT** apply more than 5.9 fl oz (0.093 pound active ingredient) per acre per year. **DO NOT** make more than three applications per year.

DIRECTIONS FOR USE

Apply **A391.01** alone or in combination with other registered pesticides for the control of weeds in rangeland, pastures, hay, grasses grown for hay or silage and grass seed production and grass grown in Conservation Reserve Programs (CRP). Note that CRP usage must be in compliance with Federal, State, and local use guidelines.

Apply **A391.01** at use rates up to 2.0 fl oz (0.031 pound active ingredient) per broadcast acre. For optimum results, weeds must be treated when small. Applications shall be made with ground equipment delivering a minimum of 10 gallons of finished spray per acre or aerial delivering a minimum of 3 gal/acre of finished spray. Adjust sprayers to provide optimum coverage of the target weeds. Refer to weed control list in Table 3 for appropriate weed control information.

Adjuvant Requirements
Control is enhanced with the addition of a nonionic surfactant (NIS) or crop oil concentrate (COC). Use a quality nonionic surfactant (NIS) containing at least 80% active at 0.25% v/v (2 pints NIS per 100 gallons) or a crop oil concentrate (COC) at 1% v/v (one gallon COC per 100 gallons), or a methylated seed oil (MSO). The use of a high quality sprayable liquid nitrogen fertilizer at 2 to 4% v/v or ammonium sulfate (AMS) used at 2 to 4 pounds per acre in addition to the NIS, or MSO or COC is allowed.

When **A391.01** is applied alone, grazing and hay operations may proceed with no restrictions.

A391.01 may be tank mixed with other labeled herbicides to control weeds not listed on this label. Read and follow all manufacturers' label directions for the companion herbicide.

For tank mixture applications, refer to the use directions and restrictions of the mixture product.

HOPS

Methods and Timing	PHI	Target Weeds	Rates	Restrictions
Post-Directed for Sucker Management	**DO NOT** apply within 7 days of harvest.	Refer to table 3	Apply 2.0 fl oz (0.031 pound active ingredient) per acre.	**DO NOT** apply **A391.01** using air blast or air assisted sprayers.
Postemergence Weed Control	**DO NOT** apply within 7 days of harvest.	Refer to table 3	Apply up to 2.0 fl oz (0.031 pound active ingredient) per acre.	**DO NOT** apply through any type of irrigation system. **DO NOT** apply more than 2.0 fl oz (0.031 pound active ingredient) per acre per application. **DO NOT** apply more than 7.6 fl oz (0.12 pound active ingredient) per acre per year. Allow a minimum of 14 days between treatments of **A391.01**.

Use Directions:

Post-Directed Application for Sucker Management.

A391.01 is a contact herbicide for directed spray application to the basal portion of the hop plant for the management of sucker growth. Apply **A391.01** at 2.0 fl oz (0.031 pound active ingredient) per acre per application in a minimum of 20 gallons of spray solution by boom-type ground application equipment only to the basal portion of the hop plant (approximately the lower 1.5 feet) and to the sucker mat which extends from the base of the plant to approximately 1.5 to 2 feet into the row.

An alternate row treatment program may be followed to avoid the removal of excessive photosynthetic capacity from the crown area by treating alternate rows on different days. Applications timing and techniques may vary from region to region. Please consult local university extension personnel for local management practices.

Postemergent Control of Broadleaf Weeds

Apply **A391.01** using shielded sprayers or hooded sprayers to control emerged and actively growing broadleaf weeds within or between the rows of the crop. Refer to Table 3 for appropriate weed control information.

Adjuvant Requirements

Coverage is essential to obtain good basal growth management. Use a nonionic surfactant (NIS) having at least 80% active ingredient at 0.25 % v/v (2 pints of NIS per 100 gallons of spray volume) or a quality crop oil concentrate (COC) at labeled rates.

If **A391.01** is used in a tank mixture, refer to the other product labels for all restrictions on tank mixing and observe all label precautions, instructions and rotational cropping restrictions.

For band treatment, apply the broadcast equivalent rate and volume per acre. To determine these:

$$\frac{\text{Band Width (inches)}}{\text{Row Width (inches)}} \times \text{Broadcast Rate Per Acre} = \text{Band Rate}$$

Band Width (inches) / Row Width (inches)	X	Broadcast Volume Per Acre	= Band Volume

Application Precautions
Extreme caution must be taken during application to avoid upward drift of the spray solution and contact with the highly susceptible new growth. Avoid applications until newly trained vines have developed sufficient barking to avoid damage to the stem and are high enough up the string to avoid contact with the apical bud.

LOW GROWING BERRY Subgroup 13-07G

Methods and Timing	PHI	Target Weeds	Rates	Restrictions
Postemerge Weed Control	Can be applied up to harvest	Refer to table 3	Apply up to 2.0 fl oz (0.031 pound active ingredient) per acre.	**DO NOT** apply more than 2 fl oz (0.031 lb ai) during the dormant year. **DO NOT** apply more than 6.15 fl oz (0.096 pound active ingredient) per acre per year.

DIRECTIONS FOR USE

A391.01 applications will control susceptible emerged broadleaf weeds. Repeat applications may be necessary for weeds that emerge after an **A391.01** treatment.

Equipment and Application
Apply only by ground equipment including boom sprayers, shielded or hooded sprayers, hand-held or high-volume wands or orchard guns. Use a minimum of 20 gallons finished spray solution per broadcast acre.

Dormant Applications
Apply **A391.01** as a broadcast application to the base of the trunk to control emerged and actively growing weeds during the dormant stage of the crop.

Post-directed Applications for Broadleaf Weed Control
Apply **A391.01** as a directed spray avoiding contact with the berry plant but directed at actively growing weeds. **A391.01** is a contact herbicide and coverage is essential for good weed control. **DO NOT** allow **A391.01** spray mist to come in contact with green stem tissue, desirable fruit, blooms or foliage.
Newly planted bush berries must only be treated with shielded sprayers or hooded sprayers.

A391.01 Use Rates
Apply up to 2 fl oz (0.031 pound active ingredient) **A391.01** per broadcast acre. For best control, apply to seedling weeds in the 2-to 3-leaf stage. Use higher labeled rates of **A391.01** for larger weeds up to 6 leaves. Weeds greater than 6 leaves may be only partially controlled. See Table 3 for **A391.01** use rates and weeds controlled.

Adjuvant Requirements
A nonionic surfactant (NIS), methylated seed oil (MSO) or crop oil concentrate (COC) is required. Use a nonionic surfactant (NIS) at 0.25% v/v (2 pints per 100 gallons of spray solution) having at least 80% active ingredient, or a methylated seed oil, or crop oil concentrate (COC)(petroleum or seed oil) at 1 to 2 % v/v (1 to 2 gallons per 100 gallons of spray solution). A high quality sprayable liquid nitrogen fertilizer at 2 to 4 % v/v (2 to 4 gallons per 100 gallons spray solution) or ammonium sulfate (AMS) at the rate of 2 to 4 pounds per acre in addition to the nonionic surfactant, methylated seed oil or crop oil is

allowed.
A391.01 may be mixed with other registered herbicides for broader spectrum weed control. When tank mixing with fertilizer solutions, be sure to prepare an **A391.01** premixture of **A391.01** and clean water.
See Mixing and Loading Instructions under the PRODUCT INFORMATION section of this label for specific mixing instructions. Refer to this and the other products' labels for mixing instructions, precautions, and restrictions. Follow the most restrictive instructions for each tank-mix partner.

Precautions
Extreme caution must be taken during applications when desirable fruit, foliage and/or blooms are present in order to avoid spotting or necrosis. **DO NOT** allow **A391.01** spray mist to come in contact with green stem tissue, desirable fruit, blooms or foliage.
For seedling or newly transplanted bushes, **DO NOT** allow spray to contact green bark of trunk area. Use shielded sprayers only.

Band Treatment Application
For band treatment, apply the broadcast equivalent rate and volume per acre. To determine these:

Band Width (inches) / Row Width (inches)	X	Broadcast Rate Per Acre	= Band Rate
Band Width (inches) / Row Width (inches)	X	Broadcast Volume Per Acre	= Band Volume

MINT

Methods and Timing	PHI	Target Weeds	Rates	Restrictions
Broadcast	**DO NOT** apply within 5 days of harvest.	Refer to table 3	Apply one application of **A391.01** at 0.5 to 1.92 fl oz (0.008 to 0.030 pound active ingredient) per acre. Use higher rates when weeds are under stress or are larger.	**DO NOT** apply to actively growing crop. **DO NOT** apply more than 1.92 fl oz (0.030 pound active ingredient) per acre per application. **DO NOT** apply more than 1.92 fl oz (0.030 pound active ingredient) per acre per year.

DIRECTIONS FOR USE

Apply **A391.01** as a broadcast application before mint breaks dormancy for control of existing broadleaf weeds.

Coverage is essential for good control.

Adjuvant Requirements
Applications shall be made in spray volumes sufficient to provide complete coverage of foliage.
Use a minimum of 10 gallons of finished spray per acre for ground application and 5 gallons per acre for aerial application. A nonionic surfactant (NIS), methylated seed oil (MSO) or crop oil concentrate (COC) is required. Use a nonionic surfactant (NIS) at 0.25% v/v (2 pints per 100 gallons of spray solution) having at least 80% active ingredient, or a methylated seed oil, or crop oil concentrate (COC)(petroleum or seed oil) at 1 to 2 % v/v (1 to 2 gallons per 100 gallons of spray solution). A high quality sprayable liquid nitrogen fertilizer at 2 to 4 % v/v (2 to 4 gallons per 100 gallons spray solution) or ammonium sulfate (AMS) at the rate of 2 to 4 pounds per acre in addition to the nonionic surfactant, methylated seed oil or crop oil is allowed. Repeat application if necessary.

For specific mixing instructions, refer to the Mixing and Loading Instructions under the PRODUCT INFORMATION section.

PEANUT

Methods and Timing	PHI	Target Weeds	Rates	Restrictions
Postemerge Weed Control	**DO NOT** apply within 7 days of harvest.	Refer to table 3	Apply up to 2.0 fl oz (0.031 pound active ingredient) per acre.	**DO NOT** apply more than 2.0 fl oz (0.031 pound active ingredient) per acre per year as a harvest aid treatment. **DO NOT** apply more than one harvest aid treatment per year. **DO NOT** apply more than 6.1 fl oz (0.096 pounds active ingredient) per acre per year. **DO NOT** feed immature peanut plant or peanut hay to livestock.
Harvest Aid	**DO NOT** apply within 7 days of harvest.	Refer to table 3		

DIRECTIONS FOR USE

Weed Control
Apply **A391.01** alone or as a tank mixture with other herbicides as a postemergence treatment or as a hooded/directed spray treatment to control emerged and actively growing weeds. Apply hooded/directed applications of **A391.01** to middles (between rows of plants) and in strips (in row of plants). Apply **A391.01** at any time during the season (see precautions). **A391.01** may be mixed with other herbicides that have pre-emergence or post-emergence activity. Any pre-emergence activity must rely on activity from other herbicides as directed on their labels. Herbicides including glyphosate may be tank mixed with **A391.01** for broader spectrum weed control. If **A391.01** is used in a tank mixture, observe the other product's label for restrictions, precautions and rotational croppinginstructions.

Harvest Aid Application
Apply **A391.01** as a harvest aid to defoliate and desiccate troublesome weeds that may be present at harvest. Apply **A391.01** alone or as a tank mixture with other peanut harvest aids.

Adjuvant Requirements
Control is enhanced with the addition of a nonionic surfactant (NIS) or crop oil concentrate (COC). Use a quality nonionic surfactant (NIS) containing at least 80% active at 0.25% v/v (2 pints NIS per 100 gallons) or a crop oil concentrate (COC) at 1% v/v (one gallon COC per 100 gallons), or a methylated seed oil (MSO). The use of a high quality sprayable liquid nitrogen fertilizer at 2 to 4 % v/v or ammonium sulfate (AMS) used at 2 to 4 pounds per acre in addition to the NIS, or MSO or COC is allowed.

Crop Rotation Restriction:
After an application of this product to peanuts, you may only rotate the field to a carfentrazone- ethyl registered crop.

RICE (A391.01 For Rice Grown in California)

Methods and Timing	PHI	Target Weeds	Rates	Restrictions
Early Post Seeding Applications to Submerged Weeds	**DO NOT** apply within 60 days of harvest.	See weed list in table 12 below.	Apply 12.0 fl oz (0.19 pounds active ingredient) per acre	**DO NOT** apply by air. **DO NOT** apply within 1/2 mile of sensitive crops. **DO NOT** apply when conditions favoring drift exist. Pre-flood treatment, once field is flooded, water must be held for at least 23 days following treatment before release. **DO NOT** apply more than 12.0 fl oz (0.19 pounds active ingredient) per single application. **DO NOT** apply more than 19.2 fl oz (0.3 pound active ingredient) per acre per year including fallow, preplant, burndown, and labeled crop applications. **DO NOT** release water for at least 23 days following a Post Flood treatment in the water.
Foliar Applications to Emerged Weeds Above the Water Surface	**DO NOT** apply within 60 days of harvest.	See weed list in table 13 below.	Apply up to 6.4 fl oz (0.10 pounds active ingredient) per acre	

DIRECTIONS FOR USE

Apply **A391.01** alone or as a tank mixture with other rice herbicides to emerged and actively growing weeds. Applications shall be made by ground equipment only using a minimum finished spray volume of 10 gallons of spray per acre.

To control weeds not listed on this label, **A391.01** may be tank mixed with other herbicides registered for use on rice. Refer to the other product's label for restrictions on tank mixing, and observe all label precautions, instructions, and restrictions.

Early Post Seeding Applications to Submerged Weeds

Apply **A391.01** at 12 fl oz (0.19 pounds active ingredient) per acre. Evenly distribute the spray solution over the flooded rice. The floodwater must be 3 to 6 inches deep. Apply at 1.5leaf stage of rice. Earlier applications may cause unacceptable crop response. Rice must be well rooted and actively growing at the time of application. Hold the floodwater at a static

depth for at least five days after application of **A391.01**. Once field is flooded, water must be held for at least 23 days following treatment before release.

When used as directed A391.01 will provide control of listed weeds at the 2 leaf stage or less.

Table 7:

Arrowhead, California
Ammannia, purple (suppression only)
Ammannia, redstem (suppression only)
Bulrush, ricefield
Umbrellaplant, smallflower (suppression only)

Tank Mix

A391.01 may be tank mixed with other herbicides to control weeds not listed on this label. Read and follow all manufacturers' label directions for the companion herbicide except for specific directions on this label. Apply **A391.01** before, after, or with an application of Londax®, Ordram® and Bolero® herbicides. Observe all applicable directions, restrictions (including water holding requirements) and precautions on the Londax, Ordram and Bolero labels.

DO NOT apply **A391.01** as a tank mixture with Regiment.

Foliar Applications to Emerged Weeds Above the Water Surface

Apply up to 6.4 fl oz **A391.01** (0.10 pound active ingredient) per acre to the foliage of exposed weeds. At least 80% of the weed foliage must be exposed before spraying **A391.01**. For optimum results, apply to actively growing weeds 20 to 45 days postseeding or the earliest practical opportunity to spray. Weed control is enhanced with greater weed exposure. If the field was drained at application, reflood twenty-four hours after application to the normal flood depth.

When used as directed A391.01 will provide control or suppression of the following weeds.

Table 8:

Bulrush, ricefield
Arrowhead, California
Ammannia, purple (suppression only)
Ammannia, redstem (suppression only)
Umbrellaplant, smallflower (suppression only)

Crop Response

Some temporary leaf speckling may occur shortly after application.

Tank Mix

A391.01 may be tank mixed with other herbicides to control weeds not listed on this label. **A391.01** may be tank mixed with propanil-containing herbicides, Londax®, Bolero®, or Whip® herbicides. Not all combinations of **A391.01** and other formulated herbicides have been tested. The EC formulations, nonionic and silicone based surfactants and crop oil concentrates, when mixed with **A391.01** will increase leaf speckling on the rice leaves. These tank mixtures must be tested on a small portion of the field to ensure crop safety prior to general use.

Crop Rotation Restriction:

After an application of this product to rice, you may only rotate the field to a carfentrazone-ethyl registered crop.

RICE (Southern US Only; not permitted in California)

Methods and Timing	PHI	Target Weeds	Rates	Restrictions
Pre-flood Applications to Dry Seeded Rice	**DO NOT** apply within 60 days of harvest once field is flooded.	See weed list in table 10 below	Apply 1.25 to 3.2 fl oz (0.0195 to 0.05 pound active ingredient) per acre	**DO NOT** apply when conditions favor drift or when wind is above 10 mph. Pre-flood treatment, once field is flooded, water must be held for at least 23 days following treatment before release. **DO NOT** apply more than 8.8 fl oz (0.138 pound active ingredient) per acre per year including fallow/preplant burndown and other labeled crop applications. **DO NOT** release water for at least 23 days following a post flood treatment in the water. **DO NOT** apply more than 1.47 fl oz (0.023 pound active ingredient) per acre as a harvest aid
Post Flood Applications to Exposed Weeds		See weed list in table 11 below	Apply 1.25 to 6.4 fl oz (0.0195 to 0.10 pound active ingredient) per acre	
Harvest Aid	**DO NOT** apply no earlier than soft dough up to the 3 days of harvest.	Desiccate troublesome broadleaf weeds e.g. hemp sesbania, Indian and northern Jointvetch, morningglorie, and pigweeds.	Apply 1.25 to 1.6 fl oz (0.0195 to 0.025 pound active ingredient) per acre	

DIRECTIONS FOR USE

Apply **A391.01** alone or as a tank mixture with other rice herbicides to emerged and actively growing weeds. Apply **A391.01** with either ground or aerial spray equipment. **DO NOT** apply when conditions favor drift.

To control weeds not listed on this label, **A391.01** may be tank mixed with other herbicides registered for use on rice. For specific mixing instructions, refer to the Mixing and Loading Instructions under the PRODUCT INFORMATION section. Refer to the other product's label for restrictions on tank mixing, and observe all label precautions, instructions, and rotational cropping restrictions.

Postemergence Pre-flood Applications to Dry Seeded Rice

Apply **A391.01** at 1.25 to 3.2 fl oz (0.0195 to 0.05 pound active ingredient) per acre. Use a minimum of 10 gallons of finished spray per acre for ground application equipment, and a minimum of 3 gallons per acre of finished spray for aerial equipment. For optimum results, apply **A391.01** to weeds up to 4 inches tall Use a quality nonionic surfactant (NIS) at 0.25% v/v (2 pints per 100 gallons of spray solution) having at least 80% active ingredient. For more active treatments, use a Crop Oil Concentrate (COC) at 0.5 to 1.0% v/v (one half to one gallon per 100 gallons). Apply when the rice is at the 2 leaf stage or larger, but prior to flooding. Some leaf speckling may occur. Once field is flooded, water must be held for at least 23 days following treatment before release.

When used as directed A391.01 will provide Control of listed weeds up to 4 inches tall.
Table 9:

Cocklebur, common	Morningglory, spp.
Copperleaf, hophornbeam	Pigweed spp.
Dayflower, spreading	Purslane, common
Groundcherry, cutleaf	Redweed
Hyssop, water	Sesbania, hemp
Jointvetch, Indian	Smartweed, PA (seedling)
Jointvetch, northern	

Suppression of listed weeds

Alligatorweed	Flatsedge, rice
Ducksalad	Redstem
Eclipta	Texasweed

Tank Mix

For control of weeds listed as suppressed or not listed on this label, apply **A391.01** following a preemergence grass herbicide or tank with other rice herbicides for broad spectrum weed control. Use tank mix applications when rice is well established and in the appropriate stage of growth for treatment with **A391.01** and the tank mix partner. For optimum results, weed species must also be in the proper stage of growth as specified on the **A391.01** and tank mix partner label. Read and follow all manufacturers' label directions for the companion herbicide except for specific directions on this label. **DO NOT** add a surfactant or crop oil concentrate when tank mixing herbicides formulated as emulsifiable concentrates unless required by the tank mix partners label. For other herbicide tank mix partners that are not Emulsifiable concentrates refer to their label for specific adjuvant directed. Observe all applicable directions, restrictions and precautions on the partner herbicide labels.

Post Flood Applications to Exposed Weeds

For post flood applications apply **A391.01** to rice and weeds after the establishment of the permanent flood and when 80% of the foliage of the weeds are exposed. Apply **A391.01** at 1.25 to 6.4 fl oz per acre (0.0195 to 0.10 pound active ingredient) per acre to actively growing weeds. Use a nonionic surfactant (NIS) at 0.25% v/v (2 pints per 100 gallons of spray solution) having at least 80% active ingredient. For more active treatments, use a Crop Oil Concentrate (COC) at 1.0% v/v (one gallon per 100 gallons. Apply when the rice is at the 2- leaf stage or later. Use a minimum of 10 gallons of finished spray per acre for ground application equipment and a minimum of 3 gallons of finished spray per acre for aerial application equipment. For optimum results, make applications to small rather than larger weeds. If water level has been lowered to allow this treatment, it must be returned to normal levels 24 hours following treatment. Users of **A391.01** must hold the water on the rice fields for 23 days following treatment.

When used as directed, A391.01 will provide control of listed weeds.

Table 10:

Arrowhead, annual	Morningglory spp.
Jointvetch, Indian	Sesbania, hemp
Jointvetch, northern	

Suppression of listed weeds up to 4 inches.

Alligatorweed	Ducksalad
Ammannia, purple	Flatsedge, rice
Dayflower, spreading	Texasweed

Harvest Aid Application:
A391.01 is effective as a harvest aid to defoliate and desiccate troublesome weeds that may be present at harvest. Apply **A391.01** alone or as a tank mixture with other rice harvest aids. Harvest aid treatment applications may be made no earlier than soft dough up to the 3 day PHI. Refer to Table 1 for maximum use rate as harvest aid.
Harvest Aid Restriction: not permitted in California

Crop Rotation Restriction:
After an application of this product to rice, you may only rotate the field to a carfentrazone-ethyl registered crop.

Rice, Wild: Wild rice grown in cultivated fields where the water discharge/release can be controlled.[1]

Methods and Timing	PHI	Target Weeds	Rates	Restrictions
Postemerge Weed Control	**DO NOT** apply within 60 days of harvest.	See weed list in table 11.	Apply 6.4 to 12.0 fl oz (0.1 to 0.19 pounds active ingredient) per acre	**DO NOT** apply when conditions favoring drift exist. **DO NOT** apply when winds exceed 10 mph. **DO NOT** apply more than 12.0 fl oz (0.19 pounds active ingredient) per acre per single application. **DO NOT** apply more than 19.2 fl oz (0.3 pound active ingredient) per acre per year, including fallow/preplant, burndown, and labeled crop applications. **DO NOT** apply during the floating leaf stage when exposed wild rice leaves are most susceptible to injury. **DO NOT** apply to wild rice when there is heavy dew on the leaves or under high humidity conditions. **DO NOT** release flood water off wild rice field(s) for a minimum of 23 days after application of this product. [1Not for Use in California] [1 **DO NOT** apply within 0.5 mile of sensitive crops (for California wild rice).] [1**DO NOT** apply to wild rice by air in California] [1**DO NOT** release flood water off wild rice field(s) for a minimum of 23 days after application of this product in California.]

DIRECTIONS FOR USE

Apply **A391.01** alone or as a tank mixture with other rice herbicides to emerged and actively growing weeds. Wild rice must be well rooted and vigorously growing at the time of application. Earlier applications may cause unacceptable crop response. Applications shall be made by ground equipment using a minimum finished spray volume of 10 gallons per acre.

Apply **A391.01** to weeds at the rate of 6.4 to 12.0 fl oz (0.1 to 0.19 pound active) per acre to the foliage of exposed weeds above the water surface. Make applications after the floating leaf stage through tillering. The water in paddies may be lowered if practical. Smaller weeds with more leaf area exposed will give better control. If water is lowered for application, it may be re-flooded to normal depths 24 hours after the application

When used as directed A391.01 will provide control or suppression of the following weeds.
Table 11:

Ammannia, purple (Suppression only)
Ammannia, redstem (Suppression only)
Arrowhead, California
Bulrush, ricefield
Burrweed, giant (Suppression only)
Umbrellaplant, smallflower (Suppression only)
Waterplantain, common (Suppression only)

Crop Response
Some temporary leaf specking may occur following application. Wild rice must be well rooted and vigorously growing at the time of application. Earlier applications may cause unacceptable crop response.

Tank Mix
A391.01 may be tank mixed with other herbicides to control weeds not listed on this label. Not all combinations of **A391.01** and other formulated herbicides and adjuvants have been tested. In general, EC formulations, nonionic and silicone based surfactants, and crop oil concentrates, will increase leaf speckling on the wild rice leaves. These tank mixes must be tested on a small portion of the field to ensure crop safety prior to general use.

Precautions
Wet leaf surfaces at the time of application can cause unacceptable injury.

Crop Rotation Restriction
After an application of this product to wild rice, you may only rotate the field to a carfentrazone- ethyl registered crop.

SMALL GRAINS

Methods and Timing	PHI	Target Weeds	Rates	Restrictions
Preplant Burndown	N/A	Refer to Table 3	Apply up to 2.0 fl oz (0.031 pound active ingredient) per acre.	**DO NOT** apply more than 2.0 fl oz (0.031 pound active ingredient) per acre per application. **DO NOT** apply more than 2.0 fl oz (0.031 pound active ingredient) per acre per year. **DO NOT** apply when conditions favor drift. **DO NOT** harvest for forage within 7 days of application.
Postemergence	Except Winter Wheat – jointing stage Winter Wheat – boot stage	Refer to Table 3	Apply 0.5 to 1.0 fl oz (0.008 to 0.016 pound active ingredient) per acre.	
Harvest Aid Applications	**DO NOT** apply within 7 days of harvest.	Refer to Table 3	Apply up to 2.0 fl oz (0.031 pound active ingredient) per acre.	

Directions for Use:

Timing and method of application:

A391.01 may be applied preplant (up to 1 day before seeding), postemergence or as a harvest aid. For optimum performance, make application to actively growing weeds up to 4 inches tall and rosettes less than 3 inches across. For dense weed pressure, use the higher labeled application rate plus tank mix combinations. **Coverage is essential for good control.** Refer to Table 3 for weeds controlled at labeled rates of **A391.01**. For broader spectrum weed control, **A391.01** may be tank mixed with other herbicides registered for use in small grains.

Preplant Burndown:

Refer to the Preplant burndown section of this label.

Postemergence Application:

In-season application may be made from 4-inches tall to just prior to the boot stage.

A391.01 Use Rate

Apply from 0.5 to 1.0 fl oz **A391.01** (0.008 – 0.016 pounds active ingredient) per acre. Use a minimum finished spray solution of 10 gallons per acre by ground or 3 gallons per acre by air. Up to half of the spray volume (by air or ground) may be liquid nitrogen fertilizer.

Adjuvant Requirements

Use a nonionic surfactant (NIS) at 0.25% v/v (2 pints per 100 gallons of spray solution) having at least 80% active ingredient. The use of a high quality sprayable liquid nitrogen fertilizer (2 to 4% v/v or 2 to 4 gallons per 100 gallon spray solution) or ammonium sulfate (AMS) at the rate of 2 to 4 pounds per acre in addition to the nonionic surfactant is allowed. **DO NOT** use **A391.01** with crop oil concentrates (COC), methylated seed oils (MSO) or silicone-based adjuvants for postemergence applications.

Tank Mix

To control weeds not listed on this label, **A391.01** may be tank mixed with other registered herbicides.

For specific mixing instructions, refer to the Mixing and Loading Instructions in the MIXING INFORMATION section. Refer to the other product's label for restrictions on tank mixing, and observe all label precautions, instructions, and rotational cropping restrictions. Use aerial or ground equipment for **A391.01** applications. **Coverage is essential for good control.**

Applications shall be made by ground equipment using a minimum finished spray volume of 10 gallons of spray per acre. Applications made by air shall utilize a minimum finished spray volume of 3 gallons per acre. Up to half of the spray volume (by air or ground) may be liquid nitrogen fertilizer. Refer to Table 3 for appropriate weed control

information.

A391.01 Plus 2,4-D (amine or ester) or MCPA (amine or ester)
A391.01 may be tank mixed at a rate of 0.5 to 1.0 fl oz (0.008-0.016 pound active ingredient) per acre with 2,4-D (amine or ester) or MCPA (amine or ester) for use on small grains. For optimum results add 2,4-D (amine or ester) to the tank at 0.25 lb acid equivalent per acre or MCPA (amine or ester) at 0.375 lb acid equivalent per acre. Higher rates of these herbicides are allowed, but **DO NOT** exceed the label use rates allowed by these labels. Add nitrogen fertilizer (2 to 4% v/v) 2 to 4 gallons per 100 gallons or ammonium sulfate 4 lbs. per acre) to the tankmixture.

When applied as directed, A391.01 in tank mixtures with 2,4-D (amine or ester) or MCPA (amine or ester) herbicides will provide control of listed weeds up to 4 inchestall.

Amaranthus spp.	Nightshade, black
Bedstraw, catchweed	Pennycress, field **
Buckwheat, wild	Pepperweed, greenflower**
Cocklebur	Pigweed, prostrate
Croton, woolly	Pigweed, redroot
Fiddleneck	Pigweed, smooth
Filaree, redstem	Primrose, cutleaf
Flixweed**	Primrose, tumble
Gromwell, common	Radish, wild
Groundsel, common	Ragweed, common
Knotweed, prostrate*	Ragweed, giant
Kochia	Rocket, London
Lambsquarters, common	Sowthistle, annual
Lettuce, miners	Speedwell, ivyleaf
Lettuce, prickly	Sunflower, wild
Mustard, blue***	Tarweed, coast
Mustard, tansy***	Thistle, Russian
Mustard, tumble**	Wallflower, bushy
Mustard, wild**	Waterhemp, tall

*For Knotweed control, use **A391.01** + 2,4-D (amine or ester) only.
**These weeds can be treated from the rosette through bolting growth stages.
***Apply to rosette growth stage (before bolting) of blue mustard.

Harvest Aid
Refer to the harvest aid section of this label for use directions

SORGHUM: (Grown for Grain and Seed)

Methods and Timing	PHI	Target Weeds	Rates	Restrictions
Preplant Burndown	NA	Refer to Table 3	Apply up to 1.0 fl oz (0.016 pounds active ingredient) per acre	**DO NOT** make foliar broadcast applications to forage sorghum or sorghum grown for seed. **DO NOT** apply more than 1.0 fl oz (0.016 pounds active ingredient) per acre per application. **DO NOT** apply more than 1.0 fl oz (0.016 pound active ingredient) per acre per year including fallow, preplant burndown and labeled applications to the growing crop (not including Harvest Aid treatments). See Table 1.
Foliar Broadcast Application (Grain Sorghum Only)	**DO NOT** apply past 14 leaf collar stage	Refer to Table 3	Apply up to 0.5 fl oz (0.008 pounds active ingredient) per acre	
Directed or Shielded Spray Applications.	**DO NOT** apply past pre- boot stage (forage) 14 collar (grain)	Refer to Table 3	Apply up to 1.0 fl oz (0.016 pounds active ingredient) per acre	
Harvest Aid	**DO NOT** apply within 3 days of harvest.	Desiccate troublesome broadleaf weeds e.g. morninglories, pigweeds and velvetleaf.	Apply up to 1.0 fl oz (0.016 pounds active ingredient) per acre	**DO NOT** apply more than 1.0 fl oz (0.016 pound active ingredient) per acre per year as a Harvest Aid treatment. See Table 1.

DIRECTIONS FOR USE

A391.01 may be applied to grain and forage sorghum as a Preplant burndown; a hooded or shielded spray; and a post directed spray. In addition to these applications methods, **A391.01** may be applied to grain sorghum (sorghum grown for grain but not for seed production) as a foliar broadcast and harvest aid treatment. See Table 1 for Maximum Seasonal **A391.01** Use Rate and Table 3 for weeds controlled at labeled rates of **A391.01** on sorghum.

PREPLANT BURNDOWN
See instructions under the Preplant Burndown section of this label.

FOLIAR BROADCAST (Grain Sorghum Only)
Apply to grain sorghum from 4 inches tall to just prior to the boot stage. **A391.01** may be applied alone or as a tank mixture with other herbicides labeled for use on sorghum. Broadcast applications of **A391.01** to sorghum with wet foliage or application during periods of adverse environmental conditions including cool, cloudy, wet, or high humidity may cause increased crop response. Directed sprays are suggested under these conditions. For additional information on crop response, refer to the PRODUCT INFORMATION section of the **A391.01** label.

A391.01 Use Rates – Foliar Grain Only
DO NOT exceed 0.5 fl oz (0.008 pound active ingredient) **A391.01** per acre. See Table 3 for weeds controlled at 0.5 fl

oz of **A391.01**. Rates below 0.5 fl oz may not fully control weeds.

Adjuvant Requirements – Foliar Grain Only
Use a nonionic surfactant at 0.25% v/v (2 pints per 100 gallons of spray solution) having at least 80% active ingredient. **DO NOT** use crop oil concentrates or methylated seed oils for broadcast applications on emerged sorghum.

Tank Mix – Foliar Grain Only
For control of additional broadleaf weeds and grasses, **A391.01** may be tank mixed with 2,4-D (amine), Atrazine, Banvel®, Clarity™, Laddok®, Paramount, Peak®, Permit®, Starane® or Sterling®. Refer to this and the other product's labels for mixing instructions, precautions, and restrictions. Follow the most restrictive instructions for each tank-mix partner.

Leaf speckling can occur when **A391.01** is used with certain formulations of crop protection products and adjuvants.

DIRECTED OR SHIELDED SPRAY APPLICATIONS
Apply **A391.01** when the sorghum is at least 4 inches tall to prior to the boot stage. Use drop nozzles or other sprayers capable of directing the spray to the target weeds and away from the whorl and leaves of the sorghum plant. Applications shall be made by ground equipment using a minimum finished spray volume of 10 gallons per acre. Refer to Table 3 for weeds controlled at labeled rates of **A391.01**. **Coverage is essential for good control.** Directed, shielded, or hooded sprayers are required for post emergence treatments to forage sorghum and sorghum grown for seed.

A391.01 Use Rates – Directed or Shielded Spray
Apply up to 1.0 fl oz **A391.01** (00.016 pound active ingredient) per acre using directed or shielded sprayers.

Adjuvant Requirements – Directed or Shielded Spray
Use a nonionic surfactant at 0.25% v/v (2 pints per 100 gallons of spray solution) having at least 80% active ingredient. Crop oil concentrates or methylated seed oils may increase crop injury on sorghum.

Tank Mix – Directed or Shielded Spray
For control of additional broadleaf weeds and grasses, **A391.01** may be tank mixed with 2,4-D (amine), Atrazine, Banvel®, Clarity™, Laddok®, Paramount, Peak®, Permit®, Starane® or Sterling®. Refer to this and the other product's labels for mixing instructions, precautions, and restrictions. Follow the most restrictive instructions for each tank-mix partner.

HOODED SPRAYER APPLICATION
Apply **A391.01** with hooded sprayers to control labeled weeds between the rows of the crop. Refer to the Hooded Sprayer Applications section of this label for additional specific use directions.

HARVEST AID (WEED CONTROL)
Apply **A391.01** to defoliate and/or desiccate troublesome broadleaf weeds e.g. morninglories, pigweeds and velvetleaf that may be present at harvest.

Refer to the Harvest Aid section of this label for additional specific use directions.

PRECAUTIONS
DO NOT use crop oil concentrates or methylated seed oils for broadcast applications on emerged sorghum.

Leaf speckling can occur when **A391.01** is used with certain formulations of crop protection products and adjuvants.

SOYBEANS

Methods and Timing	PHI	Target Weeds	Rates	Restrictions
Preplant Burndown	**DO NOT** apply within 3 days of harvest	Refer to Table 3	Apply up to 1.5 fl oz (0.023 pound active ingredient) per acre	**DO NOT** apply more than 1.5 fl oz (0.023 pound active ingredient) per acre per year. **DO NOT** apply more than 1.5 fl oz (0.023 pound active ingredient) per acre per application. **DO NOT** feed treated soybean forage or hay to livestock. **DO NOT** use with diphenylether herbicides. **DO NOT** apply when conditions favoring drift exist. **DO NOT** apply when crop foliage is wet from dew, rainfall or irrigation.
[[1]]Postemergence (Broadcast)	V10	Refer to Table 3	See Directions for Use below for details	
Postemergence (Directed Spray and Hooded Sprayer Applications Only)	V10	Refer to Table 3	Apply up to 1.5 fl oz (0.023 pound active ingredient) per acre	
Harvest Aid	**DO NOT** apply within 3 days of harvest	Refer to Table 3	Apply up to 1.5 fl oz (0.023 pound active ingredient) per acre	

Directions for Use:
Apply **A391.01** alone or as a tank mixture with other herbicides to emerged and actively growing weeds. Apply to soybeans in all tillage systems from prior to planting up to prior to emergence. **DO NOT** apply **A391.01** during a period from emergence to V2. After plants have reached V3, applications are allowed up to V10.

For optimum performance, make application to actively growing weeds up to 4 inches tall and rosettes less than 3 inches across. Use the higher rates when treating more mature weeds or dense vegetative growth. **Coverage is essential for good control**. Refer to weed control list in Table 3 for appropriate weed control information.

Broadcast Postemergence Application[1]
Apply **A391.01** at 1.5 fl oz (0.023 pound active ingredient) per acre for the control of velvetleaf. **DO NOT** apply **A391.01** to soybeans with maturities less than Group 2.0. For soybeans of maturity Group 2.1 to 3.4, apply **A391.01** at rates up to 1.5 fl oz (0.023 pound active ingredient) per acre. Use caution when making applications when making these treatments.
For soybeans maturing later than Group 3.5, apply **A391.01** at rates up to 1.5 fl oz (0.023 pound active ingredient) per acre.

Adjuvant Requirements
Use NIS only as the adjuvant for this treatment at the rate of 0.25% v/v (2 pints per 100 gallons of spray solution).

Broadcast Application Precaution
The application of **A391.01** to soybeans may result in crop response. Soybeans may show some burn, speckling or necrosis of crop leaves. Soybeans quickly outgrow initial herbicide effects and yields are not affected. **DO NOT** make applications during conditions of abnormal cool, high humidity or if foliage is wet from dew, rainfall or irrigation. Users must be aware of these potential effects prior to making applications. If the user is not willing to accept these risks, applications must not be made.

For additional information on crop response, refer to the PRODUCT INFORMATION section of this label.
[[1]Not for Use in California]

Tank Mix
A391.01 may be tankmixed with other herbicides to control weeds not listed on this label. **DO NOT use with diphenylether herbicides**. Read and follow all manufacturers' label directions for the mixture herbicide except for specific directions on this label. For specific mixing instructions, refer to the Mixing and Loading Instructions under the PRODUCT INFORMATION section. For control of additional broadleaf weeds and grasses, **A391.01** may be tankmixed with glyphosate or glufosinate products for use on GMO soybeans. Leaf injury can occur when **A391.01** is used with certain formulations of crop protection products and adjuvants. Refer to the Tank Mixtures and Required Adjuvants sections under PRODUCT INFORMATION.

When used as directed A391.01 at 0.25 fl oz (0.004 pound active ingredient) per acre will provide:
Control of listed weeds up to 4 inches tall.

Velvetleaf	

When used as directed, A391.01 at 0.5 fl oz (0.008 pound active ingredient) per acre will provide:
Control of weeds up to 4 inches tall, or as specified.

Lambsquarters, common	Nightshade, black
Morningglory, Pitted (up to 3 true leaves)	Pigweed, redroot
Morningglory, Ivyleaf (up to 3 true leaves)	Waterhemp spp. (up to 3 inches tall)

Hooded Sprayer Application
Apply **A391.01** with hooded sprayers to control labeled weeds between the rows of the crop. Refer to the Hooded Sprayer Applications of this label for additional specific use directions.

Directed Sprayer Application
Use **A391.01** at 0.5 to 1.5 fl oz (0.008 to 0.023 pound active ingredient) per acre. Applications shall be made by ground equipment using a finished volume of 10 to 20 gallons of spray per acre. When soybeans are grown under very dry soil moisture conditions, the use of a high quality sprayable liquid nitrogen fertilizer (2 to 4% v/v) or 2 to 4 gallons per 100 gallon spray solution) used in addition to the nonionic surfactant is allowed. Apply as a post-directed treatment with spray directed toward the base of the plant and avoid contact with soybean foliage. The use of spray shields may reduce spray contact with soybean foliage. **A391.01** contact with soybean foliage can result in significant crop response.

Harvest Aid
Apply up to 1.5 fl oz (0.023 pound active ingredient) **A391.01** per acre, but not to exceed maximum labeled rates. Refer to the MAXIMUM ALLOWABLE **A391.01** USE RATE and the PREHARVEST INTERVAL Table (Table 2) for additional application information. If treatments of **A391.01** have been made to the crop earlier, that volume must be considered in determining the maximum use rate as a harvest aid treatment

Applications shall be made in spray volumes sufficient to provide complete coverage of foliage. Use a minimum of 15 gallons of finished spray per acre for ground application and 5 gallons per acre for aerial application. A methylated seed oil (MSO) or crop oil concentrate (COC) is required. Use methylated seed oil, or crop oil concentrate (COC) (petroleum or seed oil) at 1 to 2% v/v (1 to 2 gallons per 100 gallons of spray solution). A high quality sprayable liquid nitrogen fertilizer at 2 to 4 % v/v (2 to 4 gallons per 100 gallons spray solution) or ammonium sulfate (AMS) at the rate of 2 to 4 pounds per acre in addition to the methylated seed oil or crop oil is allowed.

Sugarcane:

Methods and Timing	PHI	Target Weeds	Rates	Restrictions
Postemergence Treatment or Hooded/directed Spray	**DO NOT** apply within 7 days of harvest.	Refer to Table 3	Apply up to 2.0 fl oz (0.031 pounds active ingredient) per acre	**DO NOT** apply more than 2.0 fl oz (0.031 pound active ingredient) per acre per application. **DO NOT** apply more than 6.1 fl oz (0.096 pounds active ingredient) per acre per year. **DO NOT** apply more than one harvest aid treatment per year. **DO NOT** apply more than 2.0 fl oz (0.031 pound active ingredient) per acre per year as a harvest aid treatment.
Harvest Aid	**DO NOT** apply within 7 days of harvest.	Desiccate troublesome broadleaf weeds e.g. morningglories, pigweeds and velvetleaf.	Apply 1.0 - 2.0 fl oz (0.016 - 0.031 pounds active ingredient) per acre	

DIRECTIONS FOR USE

Postemergence/Hood Spray Application
Apply **A391.01** alone or as a tank mixture with other herbicides as a postemergence treatment or as a hooded/directed spray treatment to control emerged and actively growing weeds. Apply **A391.01** up to 2.0 fl oz (0.031 pound active ingredient) per acre. Apply hooded/directed applications of **A391.01** to middles (between rows of plants) and in strips (in row of plants). Apply **A391.01** at any time during the season (see precautions). **A391.01** may be mixed with other herbicides that have pre-emergence or post- emergence activity. Any pre-emergence activity must rely on activity from other herbicides as directed on their labels. Herbicides including glyphosate may be tank mixed with **A391.01** for broader spectrum weed control. If **A391.01** is used in a tank mixture, observe the other product's label for restrictions, precautions and rotational cropping instructions.

Harvest Aid Application
A391.01 is effective as a harvest aid to defoliate and desiccate troublesome weeds that may be present at harvest. Apply **A391.01** alone or as a tank mixture with other sugarcane harvest aids.

Adjuvant Requirements
Control is enhanced with the addition of a nonionic surfactant (NIS) or crop oil concentrate (COC). Use a quality nonionic surfactant (NIS) containing at least 80% active at 0.25% v/v (2 pints NIS per 100 gallons) or a crop oil concentrate (COC) at 1% v/v (one gallon COC per 100 gallons), or a methylated seed oil (MSO). The use of a high quality sprayable liquid nitrogen fertilizer at 2 to 4 % v/v or ammonium sulfate (AMS) used at 2 to 4 pounds per acre in addition to the NIS, or MSO or COC is allowed.

Crop Rotation
After an application of **A391.01** to sugarcane, you may only rotate the field to a carfentrazone-ethyl registered crop.

Teff: (Grain and Forage)[1]

Methods and Timing	PHI	Target Weeds	Rates	Restrictions
Preplant Burndown	NA	Refer to table 3	Apply up to 1.0 fl oz (0.016 pounds active ingredient) per acre	**DO NOT** make foliar broadcast applications to forage Teff or Teff grown for seed. **DO NOT** apply more than 1.0 fl oz (0.016 pound active ingredient) per acre per application. **DO NOT** apply more than 2.0 fl oz (0.031pound active ingredient) per acre per year including fallow, preplant burndown and labeled applications to the growing crop (not including Harvest Aid treatments). See Table 1.
Foliar Broadcast Application (Grain Teff Only)	Jointing Stage	Refer to table 3 for weeds controlled at 0.8 fl oz (0.013 pounds active ingredient) per acre rate.	Apply up to 0.5 fl oz (0.008 pounds active ingredient) per acre	
Directed or Shielded Spray Applications.	Jointing Stage	Refer to table 3	Apply up to 1.0 fl oz (0.016 pounds active ingredient) per acre	
Harvest Aid - Forage	**DO NOT** apply within 7 days of harvest.	Desiccate troublesome broadleaf weeds e.g. morningglories, pigweeds and velvetleaf.	Apply up to 2.0 fl oz (0.031pounds active ingredient) per acre	**DO NOT** apply more than 2.0 fl oz (0.031 pound active ingredient) per acre per year as a Harvest Aid treatment. See Table 1.
Harvest Aid – Grain	**DO NOT** apply within 3 days of harvest	Desiccate troublesome broadleaf weeds e.g. morningglories, pigweeds and velvetleaf.	Apply up to 2.0 fl oz (0.031pounds active ingredient) per acre	

DIRECTIONS FOR USE

A391.01 may be applied to grain and forage Teff as a pre-plant burndown; a hooded or shielded spray; and a post directed spray. In addition to these applications methods, **A391.01** may be applied to grain Teff (Teff grown for grain but not for seed production) as a foliar broadcast and harvest aid treatment. See Table 1 for Maximum Yearly **A391.01** Use and Table 3 for weeds controlled at labeled rates of **A391.01** on teff.

PREPLANT BURNDOWN
See instructions under the Preplant Burndown section of this label.

FOLIAR BROADCAST (Grain Teff Only)
Apply to grain teff from 4 inches tall to just prior to the boot stage. **A391.01** may be applied alone or as a tank mixture with other herbicides labeled for use on teff. Broadcast applications of **A391.01** to teff with wet foliage or application during periods of adverse environmental conditions including cool, cloudy, wet, or high humidity may cause increased crop response. Directed sprays are suggested under these conditions. For additional information on crop response, refer to the PRODUCT INFORMATION section of the **A391.01** label.

A391.01 Use Rates – Foliar Grain Only
DO NOT exceed 2.0 fl oz (0.031 pound active ingredient) **A391.01** per acre. See Table 3 for weeds controlled at 0.5 fl oz (0.008 pound active ingredient) of **A391.01**. Rates below 0.5 fl oz (0.008 pound active ingredient) may not fully control weeds.

Adjuvant Requirements – Foliar Grain Only
Use a nonionic surfactant at 0.25% v/v (2 pints per 100 gallons of spray solution) having at least 80% active ingredient. **DO NOT** use crop oil concentrates or methylated seed oils for broadcast applications on emerged teff.

Tank Mix – Foliar Grain Only
For control of additional broadleaf weeds and grasses, **A391.01** may be tank mixed with 2,4-D (amine), Atrazine, Banvel®, Clarity™, Laddok®, Paramount, Peak®, Permit®, Starane® or Sterling®. Refer to this and the other product's labels for mixing instructions, precautions, and restrictions. Follow the most restrictive instructions for each tank-mix partner.

Leaf speckling can occur when **A391.01** is used with certain formulations of crop protection products and adjuvants.

DIRECTED OR SHIELDED SPRAY APPLICATIONS
Apply **A391.01** when the teff is at least 4 inches tall to prior to the boot stage. Use drop nozzles or other sprayers capable of directing the spray to the target weeds and away from the whorl and leaves of the teff plant. Applications shall be made by ground equipment using a minimum finished spray volume of 10 gallons per acre. Refer to Table 3 for weeds controlled at labeled rates of **A391.01**. **Coverage is essential for good control.** Directed, shielded, or hooded sprayers are required for post emergence treatments to forage teff and teff grown for seed.

A391.01 Use Rates – Directed or Shielded Spray
Apply up to 1.0 fl oz **A391.01** (0.016 pound active ingredient) per acre using directed or shielded sprayers.

Adjuvant Requirements – Directed or Shielded Spray
Use a nonionic surfactant at 0.25% v/v (2 pints per 100 gallons of spray solution) having at least 80% active ingredient. Crop oil concentrates or methylated seed oils may increase crop injury on teff.

Tank Mix – Directed or Shield Spray
For control of additional broadleaf weeds and grasses, **A391.01** may be tank mixed with 2,4- D (amine), Atrazine, Banvel®, Clarity™, Laddok®, Paramount, Peak®, Permit®, Starane® or Sterling®. Refer to this and the other product's labels for mixing instructions, precautions, and restrictions. Follow the most restrictive instructions for each tank-mix partner.

HOODED SPRAYER APPLICATION
Apply **A391.01** with hooded sprayers to control labeled weeds between the rows of the crop. Refer to the Hooded Sprayer Applications section of this label for additional specific use directions.

HARVEST AID (WEED CONTROL)
Apply **A391.01** to defoliate and/or desiccate troublesome broadleaf weeds e.g. morninglories, pigweeds and velvetleaf that may be present at harvest. Apply up to 1.0 fl oz (0.031 pound active ingredient) **A391.01** per acre, but not to exceed maximum labeled rates. Refer to the MAXIMUM ALLOWABLE **A391.01** USE RATE and the PREHARVEST INTERVAL Table (Table 2) for additional application information. If treatments of **A391.01** have been made to the crop earlier, that volume must be considered in determining the maximum use rate as a harvest aid treatment.

Applications shall be made in spray volumes sufficient to provide complete coverage of foliage. Use a minimum of 15 gallons of finished spray per acre for ground application and 5 gallons per acre for aerial application. A methylated seed oil (MSO) or crop oil concentrate (COC) is required. Use methylated seed oil, or crop oil concentrate (COC) (petroleum or seed oil) at 1 to 2% v/v (1 to 2 gallons per 100 gallons of spray solution). A high quality sprayable liquid nitrogen fertilizer at 2 to 4 % v/v (2 to 4 gallons per 100 gallons spray solution) or ammonium sulfate (AMS) at the rate of 2 to 4 pounds per acre in addition to the methylated seed oil or crop oil is allowed.

PRECAUTIONS
DO NOT use crop oil concentrates or methylated seed oils for broadcast applications on emerged teff.
Leaf speckling can occur when **A391.01** is used with certain formulations of crop protection products and adjuvants.

TOBACCO

Methods and Timing	PHI	Target Weeds	Rates	Restrictions
Postemerge Weed Control (pre-transplant, shielded/hooded spray, directed spray)	**DO NOT** apply within 6 days of harvest.	Refer to table 3	Apply up to 1.5 fl oz (0.024 pound active ingredient) per acre.	**DO NOT** apply more than 1.5 fl oz (0.024 pound active ingredient) per acre per application. **DO NOT** apply more than 3.2 fl oz (0.05 pounds active ingredient) per acre per year.

DIRECTIONS FOR USE

Apply **A391.01** alone or as a tank mixture with other registered herbicides to emerged and actively growing weeds For optimum performance, make applications to weeds up to 4 inches tall and rosettes less than 3 inches across. Use higher rates when treating more mature weeds or dense vegetative growth.
Coverage is essential for good control.

Adjuvant Requirements
Use adequate spray volume to achieve thorough coverage, but a minimum of 10 gallons of finished spray per acre is required. Use a quality crop oil concentrate (COC) at 1% v/v (1 gallon of COC per 100 gallons of spray solution).

A391.01 may be tank mixed with other herbicides registered for use on tobacco to provide additional weed control.

For specific mixing instructions, refer to the Mixing and Loading Instructions under the PRODUCT INFORMATION section. Refer to the other product label for restrictions on tank mixing and observe all label precautions, instructions and rotational cropping restrictions.

For additional information refer to the PRODUCT INFORMATION section of the **A391.01** label.

Pre-transplant burndown
A391.01 is a contact herbicide for pre-transplant burndown control of broadleaf weeds in tobacco. Apply **A391.01** as a broadcast application alone or as a tank mixture with other herbicides to emerged and actively growing weeds. Apply **A391.01** up to one (1) day prior to transplanting.

Shielded spray or Hooded spray
Apply **A391.01** using shielded sprayers or hooded sprayers to emerged and actively growing broadleaf weeds in tobacco from transplanting until layby. Shielded spray or hooded spray applications of **A391.01** or **A391.01** tank mixtures must utilize application equipment that must prevent contact of spray solution with the tobacco plant. **DO NOT** allow spray solution to contact tobacco foliage or green stem tissue. Refer to the Hooded Sprayer Applications section of this label for additional specific use directions.

Directed spray after first priming (Flue Cured Tobacco Only)
Apply **A391.01** as a directed spray application after the first priming in flue cured tobacco only for the control of emerged and actively growing broadleaf weeds. Directed spray equipment must position nozzles a minimum of 3 to 4 inches above the soil, with nozzles directed underneath the crop canopy. Spray solution must be directed at the base of tobacco plants for minimal contact with foliage while maintaining maximum contact with broadleaf weeds that are at appropriate treatment size. **DO NOT** apply when conditions favor drift or wind is above 10 mph.

For control of additional broadleaf weeds and grasses, **A391.01** may be tank mixed with other herbicides registered for use in tobacco at the appropriate timing. Refer to weed control list in Table 3 for appropriate weed control information. Refer to the other product's label for restrictions on tank mixing, and observe all label precautions, instructions and rotational cropping restrictions.

[[1]Not for Use in California]

TUBEROUS AND CORM VEGETABLES (SUBGROUP 1C & 1D – EXCEPT POTATO)

Methods and Timing	PHI	Target Weeds	Rates	Restrictions
[[1]]**Fallow Systems** See the **Fallow Systems** section for directions for application. **Preplant Burndown** See the **Preplant Burndown** section for directions for application.	**DO NOT** apply within 7 days of harvest.	Refer to table 3	Apply up to 2.0 fl oz A391.01 (0.031 pound active ingredient) per acre.	**DO NOT** apply more than 5.8 fl oz (0.09 pound active ingredient) per acre per application. **DO NOT** apply more than 11.6 fl oz of (0.181 pound active ingredient) per acre per crop year as a desiccant. **DO NOT** apply when conditions favor drift or wind is above 10 mph.
Harvest Aid	**DO NOT** apply within 7 days of harvest.	3	Apply 3.2 to 5.8 fl oz (0.05 to 0.09 pound active ingredient) per acre. Apply 2.0 – 5.8 fl oz	

			with other registered potato desiccants.	

DIRECTIONS FOR USE

Apply **A391.01** alone or in a tank mix combination with other herbicides and insecticides as a fallow systems treatment, as a preplant burndown treatment and/or as a harvest aid to desiccate potatoes and those susceptible weeds that may be present.

[1]**Fallow Systems**
Apply **A391.01** by ground or air alone or with other herbicides in the fallow period prior to planting or the emergence of any crop listed on this label to control or suppress weeds. For optimum performance, make applications to actively growing weeds up to 4 inches high or rosettes less than 3 inches across. **Coverage is essential for good weed control.**

A391.01 may be utilized in Fallow Cropping Systems for chemical weed control to aid in moisture conservation between cropping periods.

[1Not for Use in California]

Preplant Burndown
Apply **A391.01** alone or with other herbicides or liquid fertilizers as a burn-down treatment to control or suppress weeds. **A391.01** is effective as a burndown treatment for crops prior to new plantings. **DO NOT** exceed the applicable amounts as listed for the specific crop in the MAXIMUM ALLOWABLE **A391.01** USE in Table 1. For optimum performance, make applications to actively growing weeds up to 4 inches high or rosettes less than 3 inches across. **Coverage is essential for good control**. Optimum broad-spectrum control of annual and perennial weeds requires a tank mix with a labeled burndown herbicide including glyphosate, glufosinate, paraquat, 2,4-D, or dicamba.

Harvest Aid Desiccation Application
Apply **A391.01** foliar to potatoes in the later stages of senescence for desiccation of potato foliage and vines. **A391.01** will also desiccate late season susceptible broadleaf weeds to aid in tuber harvest. Adequate desiccation is achieved within 14 days after the initial treatment is applied. If the potato crop is in the active vegetative growth stage when desiccation is initiated, two applications may be required to provide desiccation of leaf and stem tissue. Dense potato canopy, large plant size and environmental conditions not conducive to product absorption or activity will reduce initial application efficacy and increase the need for a second application. If a second application is necessary, apply at 7 to 14 days after the first application. **Thorough coverage of the potato plant to be desiccated is essential.** Use a sufficient volume of water to obtain thorough coverage of the potato leaves and vines.

Ground Application
Apply **A391.01** in at least 20 gallons of water per acre. Vary the spray volume and spray pressure as indicated by the density of the potato canopy and vines to assure thorough spray coverage. Increase the spray volume and pressure if the potato canopy is dense or under cool, cloudy or dry conditions. Increased spray volumes will enhance performance.

Aerial Application
Apply **A391.01** with aerial equipment using 5 to 10 gallons of water per acre, using higher volumes when potato canopies and vines are dense. Adjust the nozzles to provide a uniform pattern and a droplet size of 350 to 450 microns.

Adjuvant Requirements
A nonionic surfactant (NIS), methylated seed oil (MSO), crop oil concentrate (COC) or other suitable surfactant mixture is required. Use a nonionic surfactant (NIS) at 0.25% v/v (2 pints per 100 gallons of spray solution) having at least 80% active ingredient, or a methylated seed oil, or crop oil concentrate (COC)(petroleum or seed oil) at 1 to 2 % v/v (1 to 2

gallons per 100 gallons of spray solution. The use of a high quality sprayable liquid nitrogen fertilizer at 2 to 4 % v/v (2 to 4 gallons per 100 gallons spray solution) or ammonium sulfate (AMS) at the rate of 2 to 4 pounds per acre in addition to the nonionic surfactant methylated seed oil or crop oil is allowed.
Adjuvant rates may be increased as spray volumes exceed 20 gallons per acre.

Tank Mix
Apply **A391.01** as a tank mix or as a sequential application with other potato desiccants. Refer to the other product's label for restrictions on tank mixing, and observe all label precautions, instructions and rotational cropping restrictions.

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Store in a tightly closed container in a cool, dry place. Store in original container and out of reach of children, preferably in a locked storage area.

PESTICIDE DISPOSAL: Pesticide spray mixture or rinsate that cannot be used must be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the 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 HANDLING: [Nonrefillable container. DO NOT reuse or refill this container. If empty: Offer for recycling if available or discard in a sanitary landfill. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.]

[For plastic containers ≤ 5 gallons: 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 ¼ 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 if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

[For plastic containers > 5 gallons: 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. Fill the container ¼ full with water. Recap 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 other procedures allowed by state and local authorities.]

LIMITATION OF WARRANTY AND LIABILITY

IMPORTANT: READ BEFORE USE. Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If these terms and conditions are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Disclaimer of Warranties and Limitations of Liability. **CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, injury, and other unintended consequences may result because of such factors as manner of use or application (including misuse), the presence of other materials, weather conditions, and other unknown factors, all of which are beyond the control of ATTICUS, LLC. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, ATTICUS, LLC makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond statements on this label. **LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, neither ATTICUS, LLC the manufacturer, nor the Seller shall be liable for any indirect, special, incidental or consequential damages resulting from the use, handling, application, storage, or disposal of this product. To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use, handling, application, or storage of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid.

{LANGUAGE ON LABEL AFFIXED TO CONTAINER}

CARFENTRAZONE-ETHYL	GROUP	14	HERBICIDE

A391.01[™]

[*Alternate Brand Name:* Quinark EW]

Contains carfentrazone-ethyl, the active ingredient used in [Shark® EW]. [INTENDED FOR AGRICULTURAL OR COMMERCIAL USE ON SPECIFIED LABELED CROPS ONLY]

ACTIVE INGREDIENT:	**(% by weight)**
Carfentrazone-ethyl	21.3%
OTHER INGREDIENTS:	78.7%
TOTAL:	100.0%

This product contains 1.9 pounds active ingredient per gallon.
Contains Petroleum Distillates

KEEP OUT OF REACH OF CHILDREN

CAUTION

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.)

FIRST AID	
If swallowed:	• Call a poison control center or doctor immediately for treatment advice. • **DO NOT** give any liquid to the person. • **DO NOT** induce vomiting unless told to do so by the poison control center or doctor. • **DO NOT** give anything by mouth to an unconscious person.
If on skin or clothing:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 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 to 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 SafetyCall at **1-844-685-9173** for emergency medical treatment information.

Note to Physician: Carfentrazone-ethyl is expected to have low oral and dermal toxicity, and moderate inhalation toxicity. It is expected to be slightly irritating to the skin and minimally irritating to the eyes. Treatment is otherwise controlled removal of exposure followed by symptomatic and supportive care. Contains petroleum distillate. Vomiting may cause aspiration pneumonia

For Chemical Emergency:
Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION

Harmful if swallowed. Harmful if absorbed through skin Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS: Carfentrazone-ethyl is very toxic to algae and moderately toxic to fish. **DO NOT** apply directly to water, to areas where surface water is present or to intertidal areas below the high water mark, except as specified on this label. **DO NOT** contaminate water when disposing of equipment washwaters.

FOR GROUND WATER: Residues of this chemical have properties and characteristics associated with chemicals detected in ground water. Residues of this chemical may leach into ground water if the chemical is used in areas where soils are permeable, particularly where the water table is shallow.

FOR SURFACE WATER: This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features including ponds, streams, and springs will reduce the potential loading of carfentrazone-ethyl residues from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

Fish Advisory Statement: This product may be hazardous to aquatic organisms, particularly in clear, shallow water bodies that are adjacent to treated areas. Transport to water by runoff or spray drift of this product in areas where surface water is present, or intertidal areas below the mean high water mark, should be avoided. Do not contaminate water when disposing of equipment wash water or rinsate

Non-target Organism Advisory Statement: This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by minimizing spray drift

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Store in a tightly closed container in a cool, dry place. Store in original container and out of reach of children, preferably in a locked storage area.

PESTICIDE DISPOSAL: Pesticide spray mixture or rinsate that cannot be used must be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the 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 HANDLING:

[Nonrefillable container. DO NOT reuse or refill this container. If empty: Offer for recycling if available or discard in a sanitary landfill. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.]

[For plastic containers ≤ 5 gallons: 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 ¼ 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 if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

[For plastic containers > 5 gallons: 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. Fill the container ¼ full with water. Recap 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 other procedures allowed by state and local authorities.]

See inside label booklet for additional Precautionary Statements and Directions for Use.

[A391.01] is not manufactured, or distributed by FMC Corporation, seller of [Shark® EW].

Manufactured for:
Atticus, LLC
5000 CentreGreen Way, Suite 100
Cary, NC 27513

EPA Reg. No.: 91234-XX
EPA Est. No.: _____
NET CONTENTS: _____