



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

EPA Reg. Number:

83529-139

Date of Issuance:

3/16/21

NOTICE OF PESTICIDE:

Registration  
 Reregistration  
(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

SHARDA IMAZAPYR IPA SALT  
53.1% SL

Name and Address of Registrant (include ZIP Code):

Sharda USA LLC  
c/o Wagner Regulatory Associates, Inc.  
P.O. Box 640  
Hockessin, DE 19707

**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.

Signature of Approving Official:

For  
Erik Kraft, Product Manager 24  
Fungicide and Herbicide Branch, Registration Division (7505P)

Date:

3/16/21

2. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, “EPA Reg. No. 83529-139.”
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 07/16/2020

If you have any questions, please contact Francisco Llarena-Arias by phone at 703-347-0459, or via email at [llarena-arias.francisco@epa.gov](mailto:llarena-arias.francisco@epa.gov)

[MASTER LABEL]

IMAZAPYR	GROUP	<b>2</b>	HERBICIDE
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# Sharda Imazapyr IPA Salt 53.1% SL

## ABN: Weapon

For control of undesirable vegetation growing within certain Aquatic Sites, Forestry Sites, Pasture/Rangeland, Non-Agricultural Lands, Establishment and Maintenance of wildlife openings, release of unimproved Bermudagrass and Bahiagrass, Bare-Ground Weed Control, for use under certain Paved Areas, Industrial Non-Cropland Areas including Railroad, Utility, Pipeline and Highway Rights-Of-Way, Utility Plant Sites, Petroleum Tank Farms, Pumping Installations, Fence Rows, Storage Areas, Non-Irrigation Ditch Banks, including grazed or hayed areas within these sites, roads, and transmission lines.

**ACTIVE INGREDIENT:**

Isopropylamine Salt of Imazapyr: (2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid)\* ..... 53.1%

**OTHER INGREDIENTS:** ..... 46.9%

**TOTAL:** ..... 100.0%

\*Equivalent to 43.3% 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid or 4 pounds acid per gallon.

### KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCION

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

FIRST AID	
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li><b>DO NOT</b> induce vomiting unless told to do so by a poison control center or doctor.</li> <li><b>DO NOT</b> give anything by mouth to an unconscious person.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>Take off contaminated clothing</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF INHALED:</b>	<ul style="list-style-type: none"> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
HOTLINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information concerning this product, call your poison control center at <b>1-800-222-1222</b> .	

[Optional referral statements when booklets and container labels are used:]

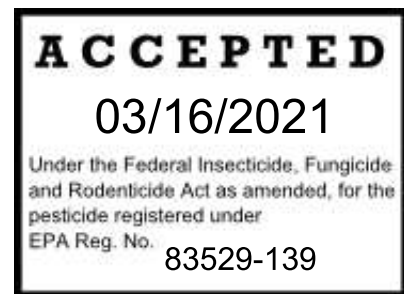
[See label booklet for [complete] [additional] [First Aid,] [Precautionary Statements], [Directions For Use], and [Storage and Disposal].]

EPA Reg. No. 83529-XXX

EPA Est. No. XXXXX-XX-XXX

Manufactured for:  
**Sharda USA LLC**   
 7217 Lancaster Pike, Suite A  
 Hockessin, Delaware 19707

Net Contents: \_\_\_\_\_ Gals. [L]



## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### CAUTION

Harmful if swallowed. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, loaders, applicators, and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves for mixers and loaders, plus applicators using handheld equipment

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. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

#### ENGINEERING CONTROLS

Pilots must use an enclosed cockpit that meet the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)].

#### USER SAFETY RECOMMENDATIONS

Users should:

- Wash thoroughly with soap and water after handling and 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

This product is toxic to plants. Drift and run-off may be hazardous to plants in water adjacent to treated areas. **DO NOT** apply to water except as specified in this label. Treatment of aquatic weeds may result in oxygen depletion or loss to decomposition of dead plants. **DO NOT** treat more than one-half the surface area of the water in a single operation and wait at least 10 - 14 days between treatments. Begin treatments along the shore and proceed outward in bands to allow aquatic organisms to move into untreated areas. **DO NOT** contaminate water when disposing of equipment, washwaters, or rinsate. This pesticide is toxic to vascular plants and must be used strictly in accordance with the drift precautions of the label.

#### PHYSICAL AND CHEMICAL HAZARDS

**Combustible: DO NOT** use or store near heat or open flame. Spray solutions of this product must be mixed, stored, and applied only in stainless steel, fiberglass, plastic, and plastic-lined steel containers.

**DO NOT** mix, store, or apply this product or spray solutions of this product in unlined steel (except stainless steel) containers or spray tanks.

#### DIRECTIONS FOR USE

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

This product can only be used in accordance with the Directions for Use on this label. **DO NOT** apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulations.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry 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 48 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:

- Coveralls
- Shoes plus socks
- Chemical-resistant gloves made of any waterproof material
- Protective eyewear

**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.

**DO NOT** enter or allow others to enter treated areas until sprays have dried.

**PRODUCT INFORMATION**

**Sharda Imazapyr IPA Salt 53.1% SL** is an aqueous solution to be mixed with water and a surfactant and applied as a spray solution to control undesirable vegetation growing within certain aquatic sites, forestry sites, pasture/rangeland, and non-agricultural lands. Aquatic sites consist of standing and flowing water, estuarine/marine, wetland, and riparian areas. Non-agricultural lands include private, public, and military land as follows: uncultivated non-agricultural areas (including airports, highway, railroad and utility rights-of-way, and sewage disposal areas), uncultivated agricultural areas – non-crop producing (including farmyards, fuel storage areas, fence rows, non-irrigation ditch banks, and barrier strips), industrial sites – outdoor (including lumber yards, pipeline, and tank farms) and natural areas (including wildlife management areas, wildlife openings, wildlife habitats, recreation areas, campgrounds, trailheads, and trails). **Sharda Imazapyr IPA Salt 53.1% SL** may also be used for the release of unimproved Bermudagrass and Bahiagrass, for bare-ground weed control, and for use under certain paved surfaces.

**Herbicidal Activity: Sharda Imazapyr IPA Salt 53.1% SL** will control most annual and perennial grasses and broadleaf weeds in addition to many brush and vine species with some residual control of undesirable species that germinate above the waterline. This product is readily absorbed through emergent leaves and stems and is translocated rapidly throughout the plant, with accumulation in the meristematic regions. For maximum activity, weeds must be growing robustly at the time of application, and the spray solution must include a surfactant (refer to the **Adjuvants** section for specific use directions). Treated plants stop growing soon after spray application. Chlorosis appears first in the newest leaves, and necrosis spreads from this point. In perennials, the herbicide is translocated into, and kills, underground or submerged storage organs, which prevents regrowth. Chlorosis and tissue necrosis may not be apparent in some plant species until 2 or more weeks after application. Complete kill of plants may not occur for several weeks. Applications of **Sharda Imazapyr IPA Salt 53.1% SL** are rainfast 1 hour after treatment.

**RESTRICTIONS**

- **DO NOT** use on food or feed crops.
- **DO NOT** apply this product to water within 0.5 mile upstream of an active potable water intake in flowing water (i.e., river, stream, etc.) or within 0.5 mile of an active potable water intake in a standing body of water, including a lake, pond, or reservoir.
- **DO NOT** apply to water used for irrigation except as described in use **RESTRICTIONS** and **PRECAUTIONS** sections of this label.
- **DO NOT** drain or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the treated soil may be washed or moved into contact with their roots.
- **DO NOT** use on lawns, walks, driveways, tennis courts.
- **DO NOT** side trim desirable vegetation with this product unless severe injury and plant death can be tolerated. Prevent drift of spray to desirable plants.
- If treated vegetation is to be removed from the application site, **DO NOT** use the vegetative matter as mulch or compost on or around desirable species.

**PRECAUTIONS**

- Keep from contact with fertilizers, insecticides, fungicides, and seeds.
- Clean application equipment after using this product by thoroughly flushing with water.
- **Avoiding Injury to Non-Target Plants:** Untreated desirable plants can be affected by root uptake of this product from treated soil. Injury or loss of desirable plants may result if this product is applied on or near desirable plants, on areas where their roots extend, or in locations where the treated soil may be washed or moved into contact with their roots. When making applications along shorelines where desirable plants may be present, caution must be exercised to avoid spray contact with their foliage or spray application to the soil in which they are rooted. Shoreline plants that have roots that extend into the water in an area where this product has been applied will not be adversely affected by uptake of the herbicide from the water.

**RESISTANCE MANAGEMENT**

**Sharda Imazapyr IPA Salt 53.1% SL** contains a Group 2 (Imazapyr) herbicide. Any weed population may contain plants naturally resistant to Group 2 herbicides. The resistant individuals may dominate the weed population if these herbicides are used repeatedly in the same fields. Appropriate resistance-management strategies must be followed.

To delay herbicide resistance, take one or more of the following steps:

- Rotate the use of **Sharda Imazapyr IPA Salt 53.1% SL** or other Group 2 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop

seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.

- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include:
  - Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
  - A spreading patch of non-controlled plants of a particular weed species; and
  - Surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- Report lack of performance to Sharda USA LLC or a representative.

#### MANDATORY SPRAY DRIFT MANAGEMENT

##### Aerial Applications:

- **DO NOT** release spray at a height greater than 10 ft. above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 15 mph at the application site. If wind speed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters. Applicators must use ½ swath displacement upwind at the downwind edge of field.
- Nozzles must be oriented, so the spray is directed toward the back of the aircraft.
- **DO NOT** apply when wind speeds exceed 15 mph at the application site.
- **DO NOT** apply during temperature inversions.

##### Ground Boom Applications:

- Users must only apply with the nozzle height advised by the manufacturer, but no more than 3 ft. above the ground or crop canopy unless making a turf, pasture, or rangeland application, in which case applicators may apply with a nozzle height no more than 4 ft. above the ground.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 15 mph at the application site.
- **DO NOT** apply during temperature inversions.

#### SPRAY DRIFT ADVISORIES

**THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.**

##### **IMPORTANCE OF DROPLET SIZE**

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

##### **Controlling Droplet Size – Ground Boom**

- **Volume** - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- **Pressure** - Use the lowest spray pressure advised for the nozzle to produce the target spray volume and droplet size.
- **Spray Nozzle** - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

##### **Controlling Droplet Size – Aircraft**

- **Adjust Nozzles** - Follow nozzle manufacturer's instructions for setting up nozzles. Generally, to reduce fine droplets, nozzles must be oriented parallel with the airflow in flight.

##### **BOOM HEIGHT – Ground Boom**

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom must remain level with the crop and have minimal bounce.

##### **RELEASE HEIGHT – Aircraft**



Higher release heights increase the potential for spray drift.

### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

### TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

### TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or 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. Avoid applications during temperature inversions.

### WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

### WIND EROSION

Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface must first be settled by rainfall or irrigation.

### TANK MIXTURES

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

### Adjuvants

Post-emergence applications of **Sharda Imazapyr IPA Salt 53.1% SL** require the addition of a spray adjuvant for optimum herbicide performance. Only spray adjuvants that are approved or appropriate for aquatic use can be utilized. The addition of a Chemical Producers and Distributors Associations (CPDA) certified adjuvant can increase control. A CPDA certified drift control agent may also be used.

- **Nonionic Surfactants:** Use a nonionic surfactant at the rate 0.25% v/v or higher (see manufacturer's label) of the spray solution (0.25% v/v is equivalent to 1 qt. in 100 gals.). For best results, select a nonionic surfactant with a HLB (hydrophilic to lipophilic balance) ratio between 12 and 17 with at least 70% surfactant in the formulated product. Alcohols, fatty acids, oils, ethylene glycol or diethylene glycol must not be considered as surfactants to meet the above requirements.
- **Methylated Seed Oils or Vegetable Oil Concentrates:** It is acceptable to use a methylated seed oil or vegetable-based seed oil concentrate at a rate of 12 – 16 fl. oz. (1.5 - 2 pts.) per acre in place of a surfactant. When using spray volumes greater than 30 gals. per acre methylated seed oil or vegetable-based seed oil concentrates must be mixed at a rate of 1% of the total spray volume, or alternatively use a nonionic surfactant as described above. Research indicates that these oils may aid in product deposition and uptake by plants under moisture or temperature stress.
- **Silicone Based Surfactants:** See manufacturer's label for specified rates. Silicone-based surfactants may reduce the surface tension of the spray droplet, allowing greater spreading on the leaf surface as compared to conventional nonionic surfactants. However, some silicone-based surfactants may dry too quickly, limiting herbicide uptake.
- **Invert Emulsions:** **Sharda Imazapyr IPA Salt 53.1% SL** can be applied as an invert emulsion. The spray solution results in an invert (water-in-oil) spray emulsion designed to minimize spray drift and spray run-off, resulting in more herbicide on the target foliage. The spray emulsion may be formed in a single tank (batch mixing) or injected (in-line mixing). Consult the invert chemical label for proper mixing directions. **DO NOT** apply more than 3 pts. or 48 fl. oz. (1.5 lbs. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre in an invert emulsion.
- **Fertilizer/Surfactant Blends:** Nitrogen based liquid fertilizers including 28%N, 32%N, 10-34-0 or ammonium sulfate, may be added at the rate of 24 – 48 fl. oz. (2 - 3 pts.) per acre in combination with the specified rate of nonionic surfactant, methylated seed oil or vegetable/seed oil concentrate. The use of fertilizers in a tank mix without a nonionic surfactant, methylated seed oil, or vegetable/seed oil concentrate is not advised.
- **Other:** An antifoaming agent, spray pattern indicator or drift reducing agent may be applied at the product labeled rate if necessary or desired.

### Compatibility

Before full-scale mixing of **Sharda Imazapyr IPA Salt 53.1% SL** with other pesticides, emulsifiers, fertilizers, surfactants, or oils, determine the compatibility of the proposed mixture. Use proportionate quantities of each ingredient and mix in a small container. Always mix 1 product thoroughly with the diluent before adding another product. If no incompatibility is evident after 30 minutes, the mixture is compatible for spraying. To evaluate potential short-term effects of applying the mixture, test the tank mix combination on a few plants or a small area before larger-scale treatments. Wait at least 2 - 3 days for problems to become apparent.

**IMPORTANT:** Mixing with other substances may increase the risk of mixing incompatibilities, reduced effectiveness and/or cause crop

injury or loss. To the extent consistent with applicable law, any liability for loss, injury or damage resulting from a mixture not specified on this label or in manufacturer's supplemental labeling distributed for this product is specifically disclaimed by manufacturer.

#### APPLICATION METHODS

**Sharda Imazapyr IPA Salt 53.1% SL** may be selectively applied by using low volume directed application techniques or may be broadcast applied using ground equipment, watercraft, or aircraft. Aerial applications to aquatic sites must be made by helicopter. In addition, **Sharda Imazapyr IPA Salt 53.1% SL** may also be applied using cut stump, cut stem, and frill or girdle treatment techniques within non-agricultural lands (see **NON-AGRICULTURAL LAND USE** section for specific use sites), pasture/rangeland, and aquatic sites. Refer to the below **AERIAL APPLICATION** and **GROUND APPLICATION** sections for additional details.

#### AERIAL APPLICATION

All precautions must be taken to minimize or eliminate spray drift. Both helicopter and fixed wing aircraft can be used to apply **Sharda Imazapyr IPA Salt 53.1% SL**, but applications to aquatic sites are restricted to helicopter only. **DO NOT** make applications by helicopter or fixed wing aircraft unless appropriate buffer zones can be maintained to prevent spray drift out of the target area, or when spray drift as a result of helicopter application can be tolerated. Aerial equipment designed to minimize spray drift including a helicopter equipped with a Microfoil™ boom Thru-Valve™ boom or raindrop nozzles must be used and calibrated. Except when applying with a Microfoil boom, a drift control agent may be added at the specified label rate. **DO NOT** side trim with **Sharda Imazapyr IPA Salt 53.1% SL** unless death of treated tree can be tolerated.

Uniformly apply the specified amount of **Sharda Imazapyr IPA Salt 53.1% SL** in 2 - 30 gals. of water per acre. A foam reducing agent may be added at the specified label rate.

Immediately after each use of this product thoroughly clean application equipment, including landing gear. Uncoated steel surfaces (except stainless steel surfaces) may result in corrosion and failure after prolonged exposure to the product. The maintenance of a paint (organic coating) may prevent corrosion.

#### GROUND APPLICATION

##### Foliar Applications

**Low Volume Foliar:** Use equipment calibrated to deliver 5 - 20 gals. of spray solution per acre. To prepare the spray solution, thoroughly mix in water 0.25% - 2.5% of **Sharda Imazapyr IPA Salt 53.1% SL** plus surfactant (refer to the **Adjuvants** section). A foam reducing agent may be applied at the label rate, if needed. For control of difficult species (see the **AQUATIC WEEDS CONTROLLED** and **TERRESTRIAL WEEDS CONTROLLED** sections for relative susceptibility of weed species), use the higher concentrations of herbicide and/or spray volumes but **DO NOT** apply more than the maximum rates specified in each section of this label. Excessive wetting of foliage is not necessary.

For low volume foliar application, select proper nozzles to avoid over-application. Proper application is critical to ensure desirable results. Best results are achieved when the spray covers the crown and approximately 70% of the plant. The use of an even flat fan tip with a spray angle of 40 degrees or less will aid in proper deposition.

Appropriate tip sizes include 4004E, or 1504E. For a straight stream and cone pattern, adjustable cone nozzles including 5500 X3 or 5500 X4 may be used. Attaching a rollover valve onto a Spraying Systems Model 30 gunjet or other similar spray guns allows for the use of both a flat fan and cone tips on the same gun.

Moisten, but **DO NOT** drench target vegetation causing spray solution to run-off.

**Low Volume Foliar with Backpacks:** For low-growing species, spray down on the crown, covering crown and penetrating approximately 70% of the plant.

For target species 4 - 8 ft. tall, swipe the sides of target vegetation by directing spray to at least 2 sides of the plant in smooth vertical motions from the crown to the bottom. Make sure to cover the crown whenever possible.

For target species over 8 ft. tall, lace sides of the target vegetation by directing spray to at least 2 sides of the target in smooth zigzag motions from crown to bottom.

**Low Volume Foliar with Hydraulic Handgun Application Equipment:** Use same technique as described above for **Low Volume Foliar with Backpacks**.

For broadcast applications, simulate a gentle rain near the top of target vegetation, allowing spray to contact the crown and penetrate the target foliage without falling to the understory. Herbicide spray solution which contacts the understory may result in severe injury or death of plants in the understory.

**High Volume Foliar:** For optimum performance when spraying medium to high-density vegetation, use equipment calibrated to deliver up to 100 gals. of spray solution per acre (GPA). Spray solutions exceeding 100 GPA may result in excessive spray run-off, causing increased ground cover injury, and injury to desirable species.

To prepare the spray solution, thoroughly mix **Sharda Imazapyr IPA Salt 53.1% SL** in water and add a surfactant (see **Adjuvant** section



for specific instructions and rates of surfactants). A foam-reducing agent may be added at the label rate, if needed. For control of difficult species (see the **AQUATIC WEEDS CONTROLLED** and **TERRESTRIAL WEEDS CONTROLLED** sections for relative susceptibility of weed species), use the higher concentrations of herbicide and/or spray volumes, but **DO NOT** apply more than the maximum rates specified in each section of this label. Uniformly cover the foliage of the vegetation to be controlled but **DO NOT** apply to run-off. Excessive wetting of foliage is not necessary.

#### Side Trimming

**DO NOT** side trim with **Sharda Imazapyr IPA Salt 53.1% SL** unless severe injury or death of the treated tree can be tolerated. This product is readily translocated and can result in death of the entire tree.

#### Cut Surface Treatment

**Sharda Imazapyr IPA Salt 53.1% SL** may be used to control undesirable woody vegetation by applying the product solution to the cambium area of freshly cut stump surfaces or to fresh cuts on the stem of the target woody vegetation. Applications can be made at any time of the year except during periods of heavy sap flow in the Spring. **DO NOT** over apply solution causing run-off from the cut surface.

Injury may occur to desirable woody plants if the shoots extend from the same root system or their root systems are grafted to those of the treated tree.

**Sharda Imazapyr IPA Salt 53.1% SL** may be mixed as either a concentrated or dilute solution for stump and cut stem treatments. The dilute solution may be used for applications to the surface of the stump or to cuts on the stem of the target woody vegetation. Concentrated solutions may be used for applications to cuts on the stem. Use of the concentrated solution permits application to fewer cuts on the stem, especially for large diameter trees. Follow the application instructions to determine proper application techniques for each type of solution.

To prepare a dilute solution, mix 4 - 6 fluid ounces (0.12 – 0.19 lbs. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** with 1 gal. of water. If temperatures are such that freezing of the spray mixture may occur, antifreeze (ethylene glycol) may be used according to manufacturer's label to prevent freezing. The use of a surfactant or penetrating agent may improve uptake through partially callused cambiums. To prepare a concentrated solution, mix 1 qt. (32 fl. oz, 1 lb. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** with no more than 1 pint of water.

#### Cut Stump Treatment

**Dilute Solutions:** Spray or brush the solution onto the cambium area of the freshly cut stump surface. Ensure that the solution thoroughly wets the entire cambium area (the wood next to the bark of the stump).

#### Cut Stem Treatment (Injection, Hack-and-Squirt)

**Dilute Solutions:** Using standard injection equipment, apply 1 milliliter of solution at each injection site around the tree with no more than 1-inch intervals between cut edges. Ensure that the injector completely penetrates the bark at each injection site.

**Concentrate Solutions:** Using standard injection equipment, apply 1 milliliter of solution at each injection site. Make at least 1 injection cut for every 3 inches of Diameter at Breast Height (DBH) on the target tree. For example, a 3-inch DBH tree will receive 1 injection cut and a 6-inch DBH tree will receive 2 injection cuts. On trees requiring more than 1 injection site place the injection cuts at approximately equal intervals around the tree.

#### Cut Stubble

**Sharda Imazapyr IPA Salt 53.1% SL** can be applied within 2 weeks after mechanical mowing or cutting of brush. To suppress or control resprouting, uniformly apply a spray solution of **Sharda Imazapyr IPA Salt 53.1% SL** at the rate of 8 – 16 fl. oz. (0.25 – 0.5 lbs. a.e.) per acre to the cut area. **Sharda Imazapyr IPA Salt 53.1% SL** may be tank-mixed with picloram, or equivalent labeled product for this use, to aid in control or suppression of brush. The addition of 5% (v/v) or more of a penetrating agent can aid in uptake through the bark or exposed roots.

Cut stubble applications are made to the soil and cut brush stumps. This type of application may increase ground cover injury. However, vegetation will recover. Making applications of **Sharda Imazapyr IPA Salt 53.1% SL** directly to the soil can increase potential root uptake causing injury or death of desirable trees.

Efficacy can be increased and root uptake by desirable vegetation can be decreased if the brush is allowed to regrow and the foliage is treated. See the **Brush Control** section.

#### Frill or Girdle Treatment

Using a hatchet, machete, or chain saw, make cuts through the bark and completely around the tree to expose the cambium. The cut must angle downward extending into the cambium enough to expose at least 2 growth rings. Using a spray applicator or brush, apply a 12.5 - 50% solution of **Sharda Imazapyr IPA Salt 53.1% SL** into each cut until thoroughly wet. Avoid applying so much herbicide that run-off to the ground or water occurs.

### BASAL APPLICATION

**Sharda Imazapyr IPA Salt 53.1% SL** is an aqueous formulation that requires mixing with **basal oil containing at least 15% emulsifier**

or will require the addition of an emulsifier, for application to the basal area of brush and trees to control undesirable vegetation in the following non-cropland areas: access roads, airfields, airports, along forest roads, around commercial or industrial structures or outbuildings, around farm and ranch structures and outbuildings, bare-ground, construction sites, ditch banks, dry ditches and canals, fences and fencerows, firebreaks, gravel yards, habitat restoration and management areas, highways and roadsides (including aprons, medians, guardrails and rights-of-ways), industrial plant sites, industrial areas, lumber yards, natural areas, paved areas, petroleum and other tank farms, pumping installations, pipeline, power, telephone and utility rights-of-way, power stations, railroad rights-of-way, refineries, resorts, storage areas, substations, uncropped farmstead areas, uncultivated non-agricultural areas (see **NON-AGRICULTURAL LAND USE** section for specific use sites), vacant lots, walkways, wastelands, and wildlife habitat areas.

It is advisory to mix only the intended amount of mixture that is to be sprayed that day. Adequate agitation must be maintained with all emulsion mixtures to prevent phase separation. Prior to tank mixing with other products, herbicides, and oils, you must determine the compatibility of the proposed mixture (see the **Compatibility** section).

#### Thinline Basal and Stem Application

- **Sharda Imazapyr IPA Salt 53.1% SL** may be applied as a thinline basal or arcing application to the stems of susceptible species including big leaf maple (*Acer macrophyllum*), willow (*Salix* spp.), and Eucalyptus (*Eucalyptus* spp.) with a stem ground line diameter of 3" or less. Mix 12 - 24 fl. oz. (0.38 – 0.75 lbs. a.e. Imazapyr) of **Sharda Imazapyr IPA Salt 53.1% SL** in 1 gal. of **basal oil containing at least 15% emulsifier**. Maintain uniform mixtures with frequent agitation. Direct a thin line of the spray solution to the stems beginning a few feet from the ground and descending toward the base of the tree making a zig-zag motion. **DO NOT** over apply causing puddling.

#### Low Volume Basal Bark Treatments

- **Sharda Imazapyr IPA Salt 53.1% SL** at the rate of 4 - 6 fl. oz. (0.13 – 0.19 lbs. a.e.) per gallon, may be applied for low volume basal bark treatments. **Sharda Imazapyr IPA Salt 53.1% SL** at 1.5 - 2.5% is advised to be tank mixed with Relegate™ (EPA Reg. No. 228-521 or 228-552, triclopyr, butoxyethyl ester) or Garlon® 4 (EPA Reg. No. 62719-40, triclopyr, butoxyethyl ester) or other basal products to broaden the spectrum of control. Consult the herbicide labels for rates and susceptible brush species. Mixing with basal requires compatibility tests prior to mixing large quantities. Mixing aids (including emulsifiers, etc.) and ongoing agitation are required to attain a homogenous tank mix.
- Basal application must be made to the lower 12" - 18" of the target brush and go to the soil. Care must be taken to not puddle or over treat the stem. Basal application is best suited for low density brush sites, where stems do not exceed 700 stems per acre.

Spray Solution Mixing Guide						
Amount of Spray Solution Being Prepared	Sharda Imazapyr IPA Salt 53.1% SL - Alone		Sharda Imazapyr IPA Salt 53.1% SL - When Tank Mixing		Relegate or Garlon 4 (EPA Reg. No. 228-521, 228-552, or 62719-40)	
	4 fl. oz.	6 fl. oz.	1.5%	2.5%	15%	20%
1 Gallon	4 fl. oz.	6 fl. oz.	1.9 fl. oz.	3.2 fl. oz.	1.2 pts.	1.6 pts.
3 Gallons	12 fl. oz.	18 fl. oz.	5.75 fl. oz.	9.6 fl. oz.	1.8 qts.	2.4 qts.
4 Gallons	1 pt.	1.5 pts.	7.7 fl. oz.	12.8 fl. oz.	2.4 qts.	3.2 qts.
5 Gallons	1.25 pts.	1 pt. + 14 fl. oz.	9.6 fl. oz.	1 pt.	3 qts.	1 gal.
50 Gallons	1.5 gals. + 8 fl. oz.	2 gals. + 2.75 pts.	3 qts.	1.25 gals.	7.5 gals.	10 gals.
100 Gallons	3 gals. + 1 pt.	4 gals. + 2.75 qts.	1.5 gals.	2.5 gals.	15 gals.	20 gals.
16 fluid ounces = 1 pint : 2 pints = 1 quart : 4 quarts = 1 gallon						

#### FORESTRY USE

#### Site Preparation Treatment

**Sharda Imazapyr IPA Salt 53.1% SL** may be used to control labeled actively growing grasses, broadleaf weeds, vines and brambles, and woody brush and trees on forest sites in advance of regeneration for the following conifer crop species:

Common Name	Scientific Name	Sharda Imazapyr IPA Salt 53.1% SL Rate (Fl. Oz./Acre)
Loblolly Pine	<i>Pinus taeda</i>	24 – 40 (0.75 – 1.25 lb. a.e./A)
Loblolly x Pitch Hybrid		
Longleaf Pine	<i>Pinus palustris</i>	
Shortleaf Pine	<i>Pinus echinata</i>	
Virginia Pine	<i>Pinus virginiana</i>	
Slash Pine	<i>Pinus elliotii</i>	20 – 32 (0.63 – 1 lb. a.e./A)
Douglas Fir	<i>Pseudotsuga menziesii</i>	12 – 24 (0.38 – 0.75 lb. a.e./A)
Coastal Redwood	<i>Sequoia sempervirens</i>	
Incense Cedar	<i>Libocedrus decurrens</i>	
Western Hemlock	<i>Tsuga heterophylla</i>	
California Red Fir	<i>Abies magnifica</i>	

California White Fir	<i>Abies concolor</i>	(0.38 – 0.63 lb. a.e./A)
Jack Pine	<i>Pinus banksiana</i>	12 – 16 (0.38 – 0.5 lb. a.e./A)
Lodgepole Pine	<i>Pinus contorta</i>	
Pitch Pine	<i>Pinus rigida</i>	
Ponderosa Pine	<i>Pinus ponderosa</i>	
Sugar Pine	<i>Pinus lambertiana</i>	
White Pine	<i>Pinus strobus</i>	
Black Spruce	<i>Picea mariana</i>	
Red Spruce	<i>Picea rubens</i>	
White Spruce	<i>Picea glauca</i>	

Use the specified rate of **Sharda Imazapyr IPA Salt 53.1% SL** per acre applied as a broadcast foliar spray for long-term control of labeled woody plants and residual control of herbaceous weeds. Within 4 - 6 weeks of treatment, grasses and other herbaceous weeds will be controlled and may provide fuel to facilitate a site preparation burn, if desired, to control conifers or other species tolerant to the herbicide.

Apply the specified rate of **Sharda Imazapyr IPA Salt 53.1% SL** per acre in 5 - 30 gals. total spray solution for helicopter applications or 5 - 100 gals. total spray solution for mechanical ground spray and backpack applications. Use a minimum of 0.25% by volume nonionic surfactant. Use the higher label rates of **Sharda Imazapyr IPA Salt 53.1% SL** and higher spray volumes when controlling particularly dense or multilayered canopies of hardwood stands, or difficult to control species.

Tank mixes may be necessary for chemical control of conifers and other species tolerant to **Sharda Imazapyr IPA Salt 53.1% SL** in certain cases. Always follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. Combinations with other products labeled for forest site preparation may kill certain plants including legumes and blackberry which are desirable for wildlife habitat.

Where quick initial brown out (deadening of foliage) is desired for burning, apply a tank mixture of **Sharda Imazapyr IPA Salt 53.1% SL** with tricopyr or other products registered for this use at specified label rates per acre. For control of seedling pines, apply **Sharda Imazapyr IPA Salt 53.1% SL** with glyphosate or other products registered for this use at specified label rates. For site preparation, rates less than the specified label rates of **Sharda Imazapyr IPA Salt 53.1% SL** will provide suppression of hardwood brush and trees, and some re-sprouting may occur.

#### Restrictions

- **DO NOT** plant seedlings of black spruce (*Picea mariana*) or white spruce (*Picea glauca*) on sites that have been broadcast treated with this product or into the treated zone of spot or banded applications for 3 months following application or injury may occur.
- **DO NOT** apply more than 40 fl. oz (1.25 lbs. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre in an application
- **DO NOT** apply more than 48 fl. oz (1.5 lbs. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre per year
- **DO NOT** apply more than 4 applications per year when using reduced application rates.
- **DO NOT** make broadcast applications less than 14 days apart.

#### Herbaceous Weed Control

Use **Sharda Imazapyr IPA Salt 53.1% SL** for selective weeding in the following conifers:

Common Name	Scientific Name	Sharda Imazapyr IPA Salt 53.1% SL Rate (Fl. Oz./Acre)
Loblolly x Pitch Hybrid		6 – 10
Virginia Pine	<i>Pinus virginiana</i>	(0.19 – 0.31 lb. a.e./A)
Loblolly Pine	<i>Pinus taeda</i>	4 – 6 (0.13 – 0.19 lb. a.e./A)
Longleaf Pine*	<i>Pinus palustris</i>	
Shortleaf Pine*	<i>Pinus echinata</i>	
Slash Pine*	<i>Pinus elliotii</i>	
Douglas Fir*	<i>Pseudotsuga menziesii</i>	

\*Use of surfactant is not advised.

**Sharda Imazapyr IPA Salt 53.1% SL** may be applied as a broadcast treatment, banded over tree rows, or as a directed spray for release of young conifers from herbaceous weeds. To prevent possibility of conifer injury, **DO NOT** apply **Sharda Imazapyr IPA Salt 53.1% SL** when conifers are under stress from drought, diseases, animal or Winter injury, planting shock, or other stresses reducing conifer vigor. Broadcast applications may be made by helicopter, ground, or backpack sprayer. For difficult to control weeds, use the higher labeled rates. Where herbaceous weeds have overtopped conifer seedlings, a nonionic surfactant may be added to improve weed control (except for slash pine, longleaf pine, and Douglas fir), at a rate not to exceed 0.25% of spray solution volume. Some minor conifer growth inhibition may be observed when herbaceous weed control treatments are made during periods of active conifer growth.

**Sharda Imazapyr IPA Salt 53.1% SL** may also be applied using backpack or hand-held sprayers to control herbaceous weeds around individual conifer seedlings. Mix 0.4 - 0.6 fl. oz (0.012 – 0.019 lbs. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** and 0.2 fl. oz. nonionic surfactant per gallon of water. Direct the spray to the weeds and minimize the amount applied to conifer foliage for best conifer

tolerance. Ensure that maximum labeled rates per acre listed for crop species above are not exceeded.

**Sharda Imazapyr IPA Salt 53.1% SL** may be tank mixed with a sulfometuron-methyl product to broaden the spectrum of weeds controlled. Always follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. For loblolly pine, apply 4 - 6 fl. oz. (0.13 – 0.19 lbs. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** plus a sulfometuron-methyl product at the specified label rate per acre. The application of **Sharda Imazapyr IPA Salt 53.1% SL** plus a sulfometuron-methyl product at the specified label rates on other conifer species may cause growth suppression.

#### Restrictions:

- **DO NOT** apply more than 10 fl. oz (0.31 lbs. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre in an application
- **DO NOT** apply more than 48 fl. oz (1.5 lbs. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre per year
- **DO NOT** apply more than 4 applications
- **DO NOT** make broadcast applications less than 14 days apart.
- For individual plant/spot treatment, retreat as needed, however, **DO NOT** apply more than 48 fl. oz. (1.5 lbs. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre per year.

#### Conifer Release Treatments

**Sharda Imazapyr IPA Salt 53.1% SL** may be applied as a broadcast or directed spray application for suppression of labeled brush, tree, and herbaceous weed species. Directed spray applications may be made with low-volume applications in conifer stands of all ages by targeting the unwanted vegetation and avoiding direct application to the conifer. Ensure that maximum labeled rates per acre listed for crop species below are not exceeded.

#### Broadcast Applications of Sharda Imazapyr IPA Salt 53.1% SL for Release of the Following Conifers from Hardwood Competition:

Common Name	Scientific Name	Sharda Imazapyr IPA Salt 53.1% SL Rate (Fl. Oz./Acre)
Loblolly Pine <sup>3</sup>	<i>Pinus taeda</i>	12 – 20 (0.38 – 0.63 lb. a.e./A)
Loblolly x Pitch Hybrid <sup>3</sup>		
Virginia Pine <sup>3</sup>	<i>Pinus virginiana</i>	
Longleaf Pine	<i>Pinus palustris</i>	12 – 16 (0.38 – 0.5 lb. a.e./A)
Pitch Pine	<i>Pinus rigida</i>	
Shortleaf Pine	<i>Pinus echinata</i>	
Slash Pine	<i>Pinus elliotii</i>	
White Pine <sup>1</sup>	<i>Pinus strobus</i>	8 – 16 (0.25 – 0.5 lb. a.e./A)
California Red Fir	<i>Abies magnifica</i>	8 – 12 (0.25 – 0.38 lb. a.e./A)
California White Fir	<i>Abies concolor</i>	
Lodgepole Pine <sup>2</sup>	<i>Pinus contorta</i>	
Douglas Fir <sup>2</sup>	<i>Pseudotsuga menziesii</i>	
Jack Pine <sup>2</sup>	<i>Pinus banksiana</i>	
Black Spruce <sup>2</sup>	<i>Picea mariana</i>	6 – 12 (0.19 – 0.38 lb. a.e./A)
Red Spruce <sup>2</sup>	<i>Picea rubens</i>	
White Spruce <sup>2</sup>	<i>Picea glauca</i>	

<sup>1</sup> **DO NOT** make applications to white pine stands younger than 3-years-old. To minimize potential white pine injury, release treatments must not be made prior to July 15<sup>th</sup>.

<sup>2</sup> Applications must be made after formation of final conifer resting buds in the Fall or height growth inhibition may occur.

<sup>3</sup> Mid-rotation release: For broadcast applications below the pine canopy in established stands of loblolly pine, loblolly x pitch hybrid, and Virginia pine, use 16 - 32 fl. oz. (0.5 – 1 lb. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre. For mid-rotation release of other species use rates listed above.

Apply the specified rate of **Sharda Imazapyr IPA Salt 53.1% SL** per acre when making broadcast applications with helicopter or ground spray equipment. Refer to mixing and application instructions for proper spray volumes. A nonionic surfactant may be added at no more than 0.25% by volume.

Use the higher label rates of **Sharda Imazapyr IPA Salt 53.1% SL** when controlling particularly dense stands or difficult to control species. Some minor conifer growth inhibition may be observed when release treatments are made during periods of active conifer growth. To minimize potential conifer height growth inhibition, **DO NOT** make broadcast applications to conifer stands, except loblolly pine, before the end of the second growing season. To minimize potential conifer height growth inhibition, broadcast release treatments may be made late in the growing season. To prevent possibility of conifer injury, **DO NOT** apply **Sharda Imazapyr IPA Salt 53.1% SL** when conifers are under stress from drought, diseases, animal or Winter injury, or other stresses reducing conifer vigor.

**Sharda Imazapyr IPA Salt 53.1% SL** may be used to release loblolly pine seedlings during the first growing season following planting or for 1-year-old natural loblolly pine regeneration. For 1-year-old loblolly pine release, apply 12 - 20 fl. oz./A of **Sharda Imazapyr IPA Salt 53.1% SL** (0.38 – 0.63 lb. a.e./A) after July 15<sup>th</sup>. The use of rates below 16 fl. oz./A (0.5 lb. a.e./A) is intended for hardwood growth suppression and some hardwood resprouting should be expected.

**For Slash Pine and Longleaf Pine:** Broadcast release treatments over-the-top of pines for the purpose of woody plant control must be made after August 15<sup>th</sup> and only in stands 2- through 5-years-old. For applications over-the-top of slash pine and longleaf pine, **DO**



**NOT** add surfactant and use lower labeled rates on sandy soils.

**Restrictions:**

- **DO NOT** apply **Sharda Imazapyr IPA Salt 53.1% SL** when conifers are under stress from diseases, drought, animal or winter injury, or other environmental or mechanical stresses as injury may occur.
- **DO NOT** apply more than 32 fl. oz (1 lb. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre in an application
- **DO NOT** apply more than 48 fl. oz (1.5 lbs. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre per year
- **DO NOT** apply more than 4 applications when using reduced rates.
- **DO NOT** make broadcast applications less than 14 days apart.
- For individual plant/spot treatment, retreat as needed, however, **DO NOT** apply more than 48 fl. oz. (1.5 lbs. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre per year.

**For the Aerial Release to Slash Pine (*Pinus elliotii*) Stands over the age of 5 Years - Restrictions**

**Sharda Imazapyr IPA Salt 53.1% SL** may be applied as an aerial application for release of slash pine stands over the age of 5 years. In addition to reading and following all directions for this product, the following restrictions are required:

- Make applications in the Fall after slash pine height growth has stopped and buds have set.
- **DO NOT** apply before September 15<sup>th</sup> even if height growth has stopped and buds have set.
- A maximum of 12 - 14 fl. oz./A (0.38 – 0.44 lb. a.e./A) of **Sharda Imazapyr IPA Salt 53.1% SL** may be applied. Use the 12 fl. oz./A (0.37 lbs. a.e./A) rate on sandier sites.

**Spot Treatment of Undesirable Hardwood Vegetation**

**Sharda Imazapyr IPA Salt 53.1% SL** may be used as a directed foliar or cut stem application to control undesirable brush and hardwoods in the management of stands of all ages for the conifer species listed in the broadcast application section above. Refer to mixing and application instructions in the directed foliar or cut stem sections above for proper use rates, equipment, and application techniques. Ensure that the maximum labeled rates per acre listed for crop species are not exceeded. Cut stem applications may be used for spot treatment of undesirable hardwoods in Ponderosa pine stands using 12 fl. oz. (0.38 lb. a.e) or less of **Sharda Imazapyr IPA Salt 53.1% SL** per acre.

Avoid direct application to desired plant species as injury may occur. Injury may occur to non-target or desirable hardwoods or conifers if they extend from the same root system or their root systems are grafted to those of the treated tree or if their roots extend into the treated zone.

**Restrictions:**

- **DO NOT** apply **Sharda Imazapyr IPA Salt 53.1% SL** when conifers are under stress from diseases, drought, animal or winter injury, or other environmental or mechanical stresses as injury may occur.
- **DO NOT** apply more than 32 fl. oz (1 lb. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre in an application
- **DO NOT** apply more than 48 fl. oz (1.5 lbs. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre per year
- **DO NOT** apply more than 4 applications when using reduced rates.
- **DO NOT** make broadcast applications less than 14 days apart.
- For individual plant/spot treatment, retreat as needed, however, **DO NOT** apply more than 48 fl. oz. (1.5 lbs. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre per year.

**Late Rotation Vegetation Control in Western Conifer**

In California, the Pacific Northwest, and Inland Northwest, broadcast aerial applications of **Sharda Imazapyr IPA Salt 53.1% SL** up to 24 fl. oz./A (0.75 lb. a.e/A) are permissible in conifer stands that are targeted for harvesting the year following treatment. Use minimum spray volume of 15 gals. per acre. **DO NOT** use this treatment if conifer injury or mortality cannot be tolerated.

**Bag and Spray Application for Conifer Release**

In Douglas fir and Ponderosa pine stands, broadcast applications of **Sharda Imazapyr IPA Salt 53.1% SL** up to 16 fl. oz./A (0.5 lb. a.e./A) are permissible when the trees are covered by bags prior to the application. The bags must prevent the spray mix from contacting the conifer foliage. On sites with coarse-textured soils (e.g., decomposed granite, pumice, sandy, or rocky sites) or low levels of soil organic matter (5% or less) significant conifer growth inhibition and mortality is possible. **DO NOT** use this treatment on these types of sites if conifer growth inhibition and mortality cannot be tolerated.

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**NON-AGRICULTURAL LAND USE**

**Sharda Imazapyr IPA Salt 53.1% SL** may be used for woody and herbaceous weed control in non-agricultural lands including private, public, and military lands as follows: uncultivated non-agricultural areas (including airports, highway, railroad and utility rights-of-way, sewage disposal areas); uncultivated agricultural areas - non-crop producing (including farmyards, fuel storage areas, fence rows, non-irrigation ditch banks, barrier strips); industrial sites - outdoor (including lumberyards, pipeline and tank farms) including grazed or hayed areas on these sites. This product may be applied to terrestrial non-crops sites and unimproved turf sites that contain areas of temporary surface water caused by collection of water, in equipment ruts, or in other depressions created by management activities. It is permissible to treat intermittently flooded low lying sites, seasonally dry flood plains, and transitional areas between upland and lowland sites when no water is present. It is also permissible to treat marshes, swamps, and bogs after water has receded, as well as seasonally dry flood deltas.

Applications are not applicable to treatment of commercial timber or other plants grown for sale or other commercial use or for commercial seed production or for research purposes.

### Brush Control

Use the specified rate of **Sharda Imazapyr IPA Salt 53.1% SL** with the preferred application technique for control of undesirable brush.

### Tank Mixes and Application Rates for Low-Volume Foliar Brush Control\*

Target Vegetation	Sharda Imazapyr IPA Salt 53.1% SL Rate (% by volume)	Tank Mix
Mixed hardwoods without elm, locust, or pine	0.5 - 0.75	Surfactant
Mixed hardwoods containing elm, locust, and pine	0.25 - 0.5	Glyphosate IPA products (including EPA Reg. No. 288-365, 71368-21, and 524-326) at 2 - 3% or EPA Reg. No. 288-366 at 2 ½ - 4% by volume plus surfactant.
Mixed hardwoods with locust and pine but no elm		Krenite® (EPA Reg. No. 42750-247) at 2 - 5% by volume plus surfactant.
Mixed hardwoods with locust and elm but no pine		Metsulfuron-methyl products (including EPA Reg. No. 228-391 and 432-1549) at 2 oz./A or 2 - 3 grams/gal. plus surfactant.

\*Tank mixes with 2,4-D or products containing 2,4-D could result in reduced product efficacy.

### Backpack and Handheld Spray Mixing Guide

% Solution	Sharda Imazapyr IPA Salt 53.1% SL per Gallon of Mix (Fl. Oz.)	Sharda Imazapyr IPA Salt 53.1% SL per 4 Gallon Backpack (Fl. Oz.)
0.25	0.3	1.3
0.5	0.6	2.6
1	1.3	5.1
2	2.6	10.2
3	3.8	15.4
5	6.4	25.6

### Measuring Chart

128 fluid ounces	=	1 gallon
16 fluid ounces	=	1 pint
8 pints	=	1 gallon
4 quarts	=	1 gallon
2 pints	=	1 quart

### Restrictions:

- **DO NOT** apply more than 48 fl. oz (1.5 lb. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre in an application
- **DO NOT** apply more than 48 fl. oz (1.5 lbs. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre per year
- **DO NOT** apply more than 4 applications per year when using reduced application rates.
- **DO NOT** make applications less than 30 days apart.

### For Selective Control of Undesirable Weeds in Unimproved Bermudagrass and Bahiagrass

**Sharda Imazapyr IPA Salt 53.1% SL** may be used on unimproved industrial non-cropland Bermudagrass and bahiagrass turf, including roadsides, utility rights-of-way, and other non-agricultural lands. The application of **Sharda Imazapyr IPA Salt 53.1% SL** on established common and coastal Bermudagrass and bahiagrass provides control of labeled broadleaf and grass weeds. Competition from these weeds is eliminated, releasing the Bermudagrass and bahiagrass. Treatment of Bermudagrass with **Sharda Imazapyr IPA Salt 53.1% SL** results in a compacted growth habit and seedhead inhibition.

Uniformly apply with properly calibrated ground equipment using at least 10 gals. of water per acre.

**NOTE:** Temporary yellowing of grass may occur when treatment is made after growth begins.

### Restrictions:

- **DO NOT** apply more than 6 fl. oz. (0.19 lb. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre per application. See **Dosage Rates and Timing** section below for specific rates based on type of grass and timing.
- **DO NOT** apply more than 48 fl. oz. (1.5 lb. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre per year.
- **DO NOT** make more than 12 applications per year when using reduced application rates.
- **DO NOT** make applications less than 14 days apart.
- **DO NOT** add surfactant in excess of the specified rate (1 fl. oz. per 25 gals. of spray solution).
- **DO NOT** apply to grass during its first growing year.
- **DO NOT** apply to grass that is under stress from drought, disease, insects, or other causes.

### Dosage Rates and Timing

**Bermudagrass:** Apply **Sharda Imazapyr IPA Salt 53.1% SL** at 3 - 6 fl. oz. per acre (0.09 – 0.19 lb. a.e./A) when the Bermudagrass is dormant. Apply **Sharda Imazapyr IPA Salt 53.1% SL** at 3 - 4 fl. oz. per acre (0.09 – 0.13 lb. a.e./A) after the bermudagrass has reached full green-up. Applications made during green-up will delay green-up. Include a surfactant in the spray solution.



For additional pre-emergence control of annual grasses and small seeded broadleaf weeds, add Pendulum® Aquacap™ herbicide (EPA Reg. No. 241-416, Pendimethalin) at the rate of 25 – 50 fl. oz. per acre. Consult the Pendulum® label for weeds controlled and for other use directions and precautions.

For control of Johnsongrass in bermudagrass turf, apply **Sharda Imazapyr IPA Salt 53.1% SL** at 4 fl. oz. per acre (0.13 lb. a.e./A) plus 6 fl. oz./A of Roundup® (EPA Reg. No. 524-445, Glyphosate IPA salt), Shypho 41% SL (EPA Reg. No. 83529-19, Glyphosate IPA salt) or Razor® (EPA Reg. No. 228-366, Glyphosate IPA salt) along with a surfactant. For additional control of broadleaves and vines, 8 – 16 fl. oz. per acre Tahoe®3A (EPA Reg. 228-520, triclopyr, TEA salt) or Garlon®3A (EPA Reg. No. 62719-37, triclopyr TEA salt) may be added to the above mix. Observe all precautions and restrictions on the Tahoe®3A, Garlon®3A, Shypho and Roundup® labels.

**Bahiagrass:** Apply **Sharda Imazapyr IPA Salt 53.1% SL** at 2 - 4 fl. oz. per acre (0.06 – 0.13 lb. a.e./A) when the bahiagrass is dormant or after the grass has initiated green-up but has not exceeded 25% green-up. Include in the spray solution a surfactant (see **Adjuvant** section for specific use directions for surfactants).

#### Weeds Controlled in Unimproved Bermudagrass and Bahiagrass

Common Name	Scientific Name
Bedstraw*	<i>Galium</i> spp.
Bishopweed*	<i>Ptilimnium capillaceum</i>
Buttercup*	<i>Ranunculus parviflorus</i>
Carolina Geranium	<i>Geranium carolinianum</i>
Fescue	<i>Festuca</i> spp.
Foxtail	<i>Setaria</i> spp.
Little Barley	<i>Hordeum pusillum</i>
Seedling Johnsongrass	<i>Sorghum halepense</i>
Wild Carrot	<i>Daucus carota</i>
White Clover	<i>Trifolium repens</i>
Yellow Woodsorrel	<i>Oxalis stricta</i>

#### Grass Growth and Seedhead Suppression

**Sharda Imazapyr IPA Salt 53.1% SL** may be used to suppress growth and seedhead development of certain turfgrass in unimproved areas. When applied to desirable turf, this product may result in temporary turf damage and/or discoloration. Effects to the desirable turf may vary with environmental conditions. For optimum performance, application must be made prior to culm elongation. Applications may be made before or after mowing. If applied prior to mowing, allow at least 3 days of active growth before mowing. If following a mowing, allow sufficient time for the grasses to recover before applying this product or injury may be amplified.

**Restriction: DO NOT** apply to turf under stress (drought, cold, insect damaged, etc.) or severe injury or death may occur.

**Bermudagrass:** Apply **Sharda Imazapyr IPA Salt 53.1% SL** at 3 - 4 fl. oz. (0.09 – 0.13 lb. a.e.) per acre from early green-up to prior to seed head initiation. **DO NOT** add a surfactant for this application.

**Cool Season Unimproved Turf:** Apply **Sharda Imazapyr IPA Salt 53.1% SL** at 1 fl. oz. (0.03 lb. a.e.) per acre plus 0.25% nonionic surfactant. For increased suppression, **Sharda Imazapyr IPA Salt 53.1% SL** may be tank-mixed with Embark® (EPA Reg. No. 2217-768, mefluidide diethanolamine salt) (4 fl. oz. per acre, 0.12 lbs. a.e. per acre). Tank-mixes may increase injury to desired turf. Consult each product label for specified turf species and other use directions and precautions. Tank mixes with 2,4-D or products containing 2,4-D may decrease the effectiveness of this product.

#### Total Vegetation Control where Bare-Ground is Desired

**Sharda Imazapyr IPA Salt 53.1% SL** is an effective herbicide for pre-emergence or post-emergence control of many annual and perennial broadleaf and grass weeds where bare-ground is desired. **Sharda Imazapyr IPA Salt 53.1% SL** is particularly effective on hard-to-control perennial grasses. **Sharda Imazapyr IPA Salt 53.1% SL** at 12 – 48 fl. oz. per acre (0.38 – 1.5 lb. a.e./A) can be used alone or in tank-mix with herbicides approved for use in bare-ground. The degree and duration of control are dependent on the rate of **Sharda Imazapyr IPA Salt 53.1% SL** used, tank-mix partner, the volume of carrier, soil texture, rainfall, and other conditions.

Consult manufacturer's labels for specific rates and weeds controlled. Always follow the more restrictive label when making an application involving tank-mixes.

Applications of **Sharda Imazapyr IPA Salt 53.1% SL** may be made anytime of the year. Use equipment calibrated to deliver desired gals. per acre spray volume and uniformly distribute the spray pattern over the treated area.

**Post-Emergence Applications:** Always use a spray adjuvant (refer to the **Adjuvant** section of this label) when making a post-emergence application. For optimum performance on tough to control annual grasses, applications must be made at a total volume of 100 gals. per acre or less. For quicker burndown or brown-out of target weeds, **Sharda Imazapyr IPA Salt 53.1% SL** may be tank-mixed with products including Razor®, Shypho, or Roundup® (EPA Reg. Nos. 228-366, 83529-19 or 524-445, Glyphonate IPA salt). Tank mixes with 2,4-D or products containing 2,4-D may reduce the performance of this product. Always follow the more restrictive label when tank-mixing.

**Spot Treatments: Sharda Imazapyr IPA Salt 53.1% SL** may be used as a follow-up treatment to control escapes or weed encroachment in a bare-ground situation. To prepare the spray solution, thoroughly mix in each gallon of water 0.5 - 5% of **Sharda Imazapyr IPA Salt 53.1% SL** plus an adjuvant. For increased burndown, include Razor®, Shypho, Roundup® (EPA Reg. Nos. 228-366, 83529-19 or 524-445, Glyphosate IPA salt), or similar products. For added residual weed control or to increase the weed spectrum, add a product with any of the active ingredients in the table below. Always follow the more restrictive label when tank mixing.

Prodiamine	Diflufenzopyr
Dicamba	Pendimethalin
Diuron	

**Restrictions:**

- **DO NOT** apply more than 48 fl. oz. (1.5 lb. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre per application.
- **DO NOT** apply more than 48 fl. oz. (1.5 lb. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre per year.
- **DO NOT** make more than 4 applications per year at reduced application rates.
- **DO NOT** make applications less than 14 days apart.

**For Control of Undesirable Weeds Under Paved Surfaces**

**Sharda Imazapyr IPA Salt 53.1% SL** can be used under asphalt, pond liners and other paved areas, only in industrial sites or where the pavement has a suitable barrier along the perimeter that prevents encroachment of roots of desirable plants.

**Sharda Imazapyr IPA Salt 53.1% SL** must be used only where the area to be treated has been prepared according to good construction practices. If rhizomes, stolons, tubers or other vegetative plant parts are present in the site, they must be removed by scalping with a grader blade to a depth sufficient to insure their complete removal. Paving must follow applications of **Sharda Imazapyr IPA Salt 53.1% SL** as soon as possible.

Injury or death of desirable plants may result if **Sharda Imazapyr IPA Salt 53.1% SL** is applied where roots are present or where they may extend into the treated area. Roots of trees and shrubs may extend a considerable distance beyond the branch extremities (drip line).

Applications must be made to the soil surface only when final grade is established. Apply **Sharda Imazapyr IPA Salt 53.1% SL** in sufficient water (at least 100 gal. per acre) to ensure thorough and uniform wetting of the soil surface, including the shoulder areas. Add **Sharda Imazapyr IPA Salt 53.1% SL** at a rate of 3 pts. per acre (1.10 fl. oz. per 1,000 sq. ft.) (1.5 lbs. a.e./A) to clean water in the spray tank during the filling operation. Agitate before spraying.

If the soil is not moist prior to treatment, incorporation of **Sharda Imazapyr IPA Salt 53.1% SL** is needed for herbicide activation. **Sharda Imazapyr IPA Salt 53.1% SL** can be incorporated into the soil to a depth of 4" - 6" using a rototiller or disc. Rainfall or irrigation of 1" will also provide uniform incorporation.

**Restrictions:**

- **DO NOT** apply where the product may contact the roots of desirable trees or other plants.
- **Sharda Imazapyr IPA Salt 53.1% SL** must not be used under pavement on residential properties including driveways or parking lots or for use in recreational areas including under bike or jogging paths, golf cart paths, or tennis courts, or where landscape plantings could be anticipated.
- **DO NOT** move soil following application of this product.
- **DO NOT** allow treated soil to wash or move into untreated areas.
- **DO NOT** apply more than 48 fl. oz. (1.5 lb. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre per application.
- **DO NOT** apply more than 48 fl. oz. (1.5 lb. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre per year.
- **DO NOT** make more than one application per year.

**Spot Treatments and Crack-and-Crevise Treatments**

Use **Sharda Imazapyr IPA Salt 53.1% SL** as an initial or follow up treatment to control weed escapes or weed encroachment in bare-ground situations, including cracks and crevices in paved surfaces including parking lots, runways, and roadways.

**Grass Pasture and Rangeland**

**For Spot Treatment Weed Control:** For the control of undesirable vegetation in grass pasture and rangeland, **Sharda Imazapyr IPA Salt 53.1% SL** may be applied as a spot treatment at a rate of 1 - 24 fl. oz. (0.03 – 0.75 lb. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre using any of the ground application methods as described in this label. Spot applications may not exceed more than 1/10 of the area to be grazed or cut for hay in grass pasture and rangeland. See appropriate sections of this label for specific use directions for the application method and vegetation control desired.

**Restriction:**

- **DO NOT** treat more than 1/10 of the area to be cut for hay or grazed.
- **DO NOT** apply more than 24 fl. oz. (0.75 lb. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre per application.
- **DO NOT** apply more than 24 fl. oz. (0.75 lb. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre per year.
- **DO NOT** apply more than 4 applications per year at reduced rates.

- **DO NOT** make applications less than 14 days apart.

#### Grazing and Haying Restrictions:

- **DO NOT** cut forage grass for hay for 7 days after application of this product.
- There are no grazing restrictions following application of this product.

#### Rangeland Use Instructions

**Sharda Imazapyr IPA Salt 53.1% SL** may be applied to rangeland for the control of undesirable vegetation to achieve 1 or more of the following vegetation management objectives:

- Control of undesirable (noxious, invasive, and non-native) plant species.
- Control of undesirable vegetation for wildlife habitat improvement.
- Control of undesirable vegetation to aid in the establishment of desirable rangeland plant species.
- Release of existing desirable rangeland plant communities from the competitive pressure of undesirable plant species.
- Control of undesirable vegetation to aid in the establishment of desirable vegetation following a fire.
- Control of vegetation to reduce wildfire fuel.

To ensure the protection of threatened and endangered plants, when applying **Sharda Imazapyr IPA Salt 53.1% SL** to rangeland:

- Federal agencies must follow NEPA regulations to ensure protection of threatened and endangered plants.
- Other organizations or individuals must operate under a habitat conservation plan if threatened or endangered plants are known to be present on the land to be treated.
- State agencies must work with the Fish and Wildlife Service or the Service's designated State conservation agency to ensure protection of threatened and endangered plants.

See appropriate sections of this label for specific use directions for the desired rangeland vegetation management control desired.

**Sharda Imazapyr IPA Salt 53.1% SL** must only be applied to a given rangeland acre as specific weed problems arise. Long-term control of undesirable weeds ultimately depends on the successful use of the land management practices that promote the sustainability and growth of desirable rangeland plant species.

#### Rotational Crop Guideline

Rotational crops may be planted 12 months after applying **Sharda Imazapyr IPA Salt 53.1% SL** at the specified pasture and rangeland rate. Twelve months after an application of **Sharda Imazapyr IPA Salt 53.1% SL**, and before planting any crop, a successful field bioassay must be completed. The field bioassay consists of a test strip of the intended rotational crop planted in the previously treated area in the grass pasture and rangeland and grown to maturity. The test strip must include low areas and knolls and include variations in soil type and pH within the treated area. If no crop injury is evident in the test strip, the intended rotational crop may be planted the following year.

Use of **Sharda Imazapyr IPA Salt 53.1% SL** in accordance with label directions is expected to result in normal growth of rotational crops in most situations; however, various agronomic factors and environmental factors make it impossible to eliminate all risks associated with the use of this product and, therefore, rotational crop injury is always possible.

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#### TERRESTRIAL WEED CONTROL

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In terrestrial sites, **Sharda Imazapyr IPA Salt 53.1% SL** will provide pre-emergence or post-emergence control with residual control of the following target vegetation species at the rates listed. Residual control refers to control of newly germinating seedlings in both annuals and perennials. Annual weeds may be controlled by pre-emergence or post-emergence applications of **Sharda Imazapyr IPA Salt 53.1% SL**. For established biennials and perennials, post-emergence applications of **Sharda Imazapyr IPA Salt 53.1% SL** are advised.

The rates shown below pertain to broadcast applications and indicate the relative sensitivity of these weeds. The relative sensitivity must be referenced when preparing low volume spray solutions (refer to the **Low Volume Foliar** section under **GROUND APPLICATIONS**). Low volume applications may provide control of the target species with less product per acre than is shown for the broadcast treatments. This product must be used only in accordance with the specific use directions on this label.

The relative sensitivity of the species listed below can also be used to determine the relative risk of causing non-target plant injury if any of the below listed species are considered to be desirable within the area to be treated.

**Resistant Biotypes:** Naturally occurring biotypes (a plant within a given species that has a slightly different, but distinct genetic makeup from other plants of the same species) of some weeds listed on this label may not be effectively controlled. If naturally occurring resistant biotypes are present in an area, **Sharda Imazapyr IPA Salt 53.1% SL** must be tank-mixed or applied sequentially with an appropriate registered herbicide having a different mode of action to ensure control.

<b>TERRESTRIAL WEEDS CONTROLLED</b>
<b>GRASS WEEDS</b>
<b>Apply 1 - 1.5 pts. (0.5 – 0.75 lbs. a.e.) per Acre<sup>1</sup></b>

Common Name	Scientific Name	Growth Habit <sup>2</sup>
Annual Bluegrass	<i>Poa annua</i>	A
Broadleaf Signalgrass	<i>Brachiaria platyphylla</i>	A
Canada Bluegrass	<i>Poa compressa</i>	P
Downy Brome	<i>Bromus tectorum</i>	A
Fescue	<i>Festuca</i> spp.	A/P
Foxtail	<i>Setaria</i> spp.	A
Italian Ryegrass	<i>Lolium multiflorum</i>	A
Johnsongrass <sup>4</sup>	<i>Sorghum halepense</i>	P
Kentucky Bluegrass	<i>Poa pratensis</i>	P
Napier Grass*	<i>Pennisetum purpureum</i>	P
Orchardgrass	<i>Dactylis glomerata</i>	P
Paragrass	<i>Brachiaria mutica</i>	P
Quackgrass	<i>Agropyron repens</i>	P
Sandbur	<i>Cenchrus</i> spp.	A
Smooth Brome	<i>Bromus inermis</i>	P
Vaseygrass	<i>Paspalum urvillei</i>	P
Wild Oats	<i>Avena fatua</i>	A
Witchgrass	<i>Panicum capillare</i>	A
<b>Apply 1.5 - 2 pts. (0.75 – 1 lbs. a.e.) per Acre<sup>1</sup></b>		
Common Name	Scientific Name	Growth Habit <sup>2</sup>
Barnyardgrass	<i>Echinochloa crus-galli</i>	A
Beardgrass	<i>Andropogon</i> spp.	P
Bluegrass, Annual	<i>Poa annua</i>	A
Bulrush*	<i>Scirpus validus</i>	P
Cheat	<i>Bromus secalinus</i>	A
Cogongrass	<i>Imperata cylindrica</i>	P
Crabgrass	<i>Digitaria</i> spp.	A
Crowfootgrass	<i>Dactyloctenium aegyptium</i>	A
Fall Panicum	<i>Panicum dichotomiflorum</i>	A
Goosegrass	<i>Eleusine indica</i>	A
Itchgrass	<i>Rottboellia exaltata</i>	A
Lovegrass <sup>4</sup>	<i>Eragrostis</i> spp.	P
Maidencane*	<i>Panicum hemitomon</i>	A
Panicum, Browntop	<i>Panicum fasciculatum</i>	A
Panicum, Texas	<i>Panicum texanum</i>	A
Prairie Threeawn	<i>Aristida oligantha</i>	P
Sandbur, Field	<i>Cenchrus incertus</i>	A
Signalgrass	<i>Brachiaria platyphylla</i>	A
Wild Barley	<i>Hordeum</i> spp.	A
Woolly Cupgrass	<i>Eriochloa villosa</i>	A
<b>Apply 2 - 3 pts. (1 – 1.5 lbs. a.e.) per Acre<sup>1</sup></b>		
Common Name	Scientific Name	Growth Habit <sup>2</sup>
Bahiagrass	<i>Paspalum notatum</i>	P
Bermudagrass <sup>3,4</sup>	<i>Cynodon dactylon</i>	P
Big Bluestem	<i>Andropogon gerardii</i>	P
Dallisgrass	<i>Paspalum dilatatum</i>	P
Feathertop	<i>Pennisetum villosum</i>	P
Guineagrass	<i>Panicum maximum</i>	P
Saltgrass <sup>3</sup>	<i>Distichlis stricta</i>	P
Sand Dropseed	<i>Sporobolus cryptandrus</i>	P
Sprangletop	<i>Leptochloa</i> spp.	A
Timothy	<i>Phleum pratense</i>	P
Wirestem Muhly	<i>Muhlenbergia frondosa</i>	P
<b>BROADLEAF WEEDS</b>		
<b>Apply 1 - 1.5 pts. (0.5 – 0.75 lbs. a.e.) per Acre<sup>1</sup></b>		
Common Name	Scientific Name	Growth Habit <sup>2</sup>
Burdock	<i>Arctium</i> spp.	B
Carolina Geranium	<i>Geranium carolinianum</i>	A
Carpetweed	<i>Mollugo verticillata</i>	A
Clover	<i>Trifolium</i> spp.	A/P
Common Chickweed	<i>Stellaria media</i>	A

Common Ragweed	<i>Ambrosia artemisiifolia</i>	A
Dandelion	<i>Taraxacum officinale</i>	P
Dogfennel	<i>Eupatorium capillifolium</i>	A
Filaree	<i>Erodium</i> spp.	A
Fleabane	<i>Erigeron</i> spp.	A
Hoary Vervain	<i>Verbena stricta</i>	P
Indian Mustard	<i>Brassica juncea</i>	A
Kochia	<i>Kochia scoparia</i>	A
Lambsquarters	<i>Chenopodium album</i>	A
Lespedeza*	<i>Lespedeza</i> spp.	P
Miners Lettuce	<i>Montia perfoliata</i>	A
Mullein	<i>Verbascum</i> spp.	B
Nettleleaf Goosefoot	<i>Chenopodium murale</i>	A
Oxeye Daisy	<i>Chrysanthemum leucanthemum</i>	P
Pepperweed	<i>Lepidium</i> spp.	A
Pigweed	<i>Amaranthus</i> spp.	A
Puncturevine	<i>Tribulus terrestris</i>	A
Russian Thistle	<i>Salsola kali</i>	A
Smartweed	<i>Polygonum</i> spp.	A/P
Sorrell	<i>Rumex</i> spp.	P
Sunflower	<i>Helianthus</i> spp.	A
Sweet Clover	<i>Melilotus</i> spp.	A/B
Tansymustard	<i>Descurainia pinnata</i>	A
Western Ragweed	<i>Ambrosia psilostachya</i>	P
Wild Carrot	<i>Daucus carota</i>	B
Wild Lettuce	<i>Lactuca</i> spp.	A/B
Wild Parsnip	<i>Pastinaca saliva</i>	B
Wild Turnip	<i>Brassica campestris</i>	B
Woollyleaf Bursage	<i>Franseria tomentosa</i>	P
Yellow Woodsorrel	<i>Oxalis stricta</i>	P

**Apply 1.5 - 2 pts. (0.75 – 1 lbs. a.e.) per Acre<sup>1</sup>**

Common Name	Scientific Name	Growth Habit <sup>2</sup>
Broom Snakeweed	<i>Gutierrezia sarothrae</i>	P
Bull Thistle	<i>Cirsium vulgare</i>	B
Burclover	<i>Medicago</i> spp.	A
Chickweed Mouseear	<i>Cerastium vulgatum</i>	A
Clover Hop	<i>Trifolium procumbens</i>	A
Cocklebur	<i>Xanthium strumarium</i>	A
Cudweed	<i>Gnaphalium</i> spp.	A
Desert Camelthorn	<i>Alhagi pseudalhagi</i>	P
Dock	<i>Rumex</i> spp.	P
Fiddleneck	<i>Amsinckia intermedia</i>	A
Goldenrod	<i>Solidago</i> spp.	P
Henbit	<i>Lamium amplexicaule</i>	A
Knotweed, Prostrate	<i>Polygonum aviculare</i>	A/P
Pokeweed	<i>Phytolacca americana</i>	P
Purslane	<i>Portulaca</i> spp.	A
Pusley, Florida	<i>Richardia scabra</i>	A
Rocket London	<i>Sisymbrium irio</i>	A
Rush Skeletonweed <sup>5</sup>	<i>Chondrilla juncea</i>	B
Saltbush	<i>Atriplex</i> spp.	A
Shepherd's Purse	<i>Capsella bursa-pastoris</i>	A
Spurge, Annual	<i>Euphorbia</i> spp.	A
Stinging Nettle <sup>5</sup>	<i>Urtica dioica</i>	P
Velvetleaf	<i>Abutilon theophrasti</i>	A
Yellow Starthistle	<i>Centaurea solstitialis</i>	A

**Apply 2 - 3 pts. (1 – 1.5 lbs. a.e.) per Acre<sup>1</sup>**

Common Name	Scientific Name	Growth Habit <sup>2</sup>
Arrowwood	<i>Pluchea sericea</i>	A
Canada Thistle	<i>Cirsium arvense</i>	P
Giant Ragweed	<i>Ambrosia trifida</i>	A
Gray Rabbitbrush	<i>Chrysothamnus nauseosus</i>	P
Little Mallow	<i>Malva parviflora</i>	B



Milkweed	<i>Asclepias</i> spp.	P
Primrose	<i>Oenothera kunthiana</i>	P
Silverleaf Nightshade	<i>Solarium elaeagnifolium</i>	P
Sowthistle	<i>Sonchus</i> spp.	A
Texas Thistle	<i>Cirsium texanum</i>	P
<b>VINES AND BRAMBLES</b>		
<b>Apply 0.5 pt. (0.25 lbs. a.e.) per Acre</b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Growth Habit<sup>2</sup></b>
Field Bindweed	<i>Convolvulus arvensis</i>	P
Hedge Bindweed	<i>Calystegia sepium</i>	A
<b>Apply 1 - 1.5 pts. (0.5 – 0.75 lbs. a.e.) per Acre<sup>1</sup></b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Growth Habit<sup>2</sup></b>
Wild Buckwheat	<i>Polygonum convolvulus</i>	P
<b>Apply 1.5 - 2 pts. (0.75 – 1 lbs. a.e.) per Acre<sup>1</sup></b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Growth Habit<sup>2</sup></b>
Greenbriar	<i>Smilax</i> spp.	P
Honeysuckle <sup>4</sup>	<i>Lonicera</i> spp.	P
Morningglory	<i>Ipomoea</i> spp.	A/P
Poison Ivy	<i>Rhus radicans</i>	P
Redvine	<i>Brunnichia cirrhosa</i>	P
Wild Rose <sup>4</sup> Including: Multiflora Rose Macartney Rose	<i>Rosa</i> spp.  <i>Rosa multiflora</i> <i>Rosa bracteata</i>	P  P P
<b>Apply 2 - 3 pts. (1 – 1.5 lbs. a.e.) per Acre<sup>1</sup></b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Growth Habit<sup>2</sup></b>
Trumpet creeper	<i>Campsis radicans</i>	P
Virginia Creeper	<i>Parthenocissus quinquefolia</i>	P
Wild Grape	<i>Vitis</i> spp.	P
<b>BRUSH SPECIES</b>		
<b>Apply 1 - 2 pts. (0.5 – 1 lbs. a.e.) per Acre<sup>1</sup></b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Growth Habit<sup>2</sup></b>
Brazilian Peppertree	<i>Schinus terebinthifolius</i>	P
Chinese Tallow Tree Popcorn Tree	<i>Sapium sebiferum</i>	P
Russian Olive	<i>Elaeagnus angustifolia</i>	P
Sumac	<i>Rhus</i> spp.	P
Willow	<i>Salix</i> spp.	P
<b>Apply 2 - 3 pts. (1 – 1.5 lbs. a.e.) per Acre<sup>1</sup></b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Growth Habit<sup>2</sup></b>
Alder	<i>Alnus</i> spp.	P
American Beech	<i>Fagus grandifolia</i>	P
Ash <sup>4</sup>	<i>Fraxinus</i> spp.	P
Aspen	<i>Populus</i> spp.	P
Autumn Olive	<i>Elaeagnus umbellata</i>	P
Bald Cypress	<i>Taxodium distichum</i>	P
Bigleaf Maple	<i>Acer macrophyllum</i>	P
Birch <sup>4</sup>	<i>Betula</i> spp.	P
Black Gum <sup>6</sup>	<i>Nyssa sylvatica</i>	P
Black Oak	<i>Quercus kelloggii</i>	P
Boxelder	<i>Acer negundo</i>	P
Ceanothus	<i>Ceanothus</i> spp.	P
Cherry <sup>4, 6</sup>	<i>Prunus</i> spp.	P
Chinaberry	<i>Melia azedarach</i>	P
Chinquapin	<i>Castanopsis chrysophylla</i>	P
Cottonwood	<i>Populus trichocarpa</i> <i>P deltoides</i>	P
Cypress	<i>Taxodium</i> spp.	P
Dogwood <sup>4</sup>	<i>Cornus</i> spp.	P
Elm <sup>7</sup>	<i>Ulmus</i> spp.	P
Eucalyptus	<i>Eucalyptus</i> spp.	P



Hawthorn	<i>Crataegus</i> spp.	P
Hickory <sup>4</sup>	<i>Carya</i> spp.	P
Huckleberry	<i>Gaylussacia</i> spp.	P
Lyonia Spp. Including: Fetterbush Staggerbush	<i>Lyonia lucida</i> <i>Lyonia mariana</i>	P P
Madrone	<i>Arbutus menziesii</i>	P
Maple	<i>Acer</i> spp.	P
Melaleuca	<i>Melaleuca quinquenervia</i>	P
Mulberry <sup>4,8</sup>	<i>Morus</i> spp.	P
Oak <sup>9</sup>	<i>Quercus</i> spp.	P
Persimmon <sup>6</sup>	<i>Diospyros virginiana</i>	P
Poison Oak	<i>Rhus diversiloba</i>	P
Poplar	<i>Populus</i> spp.	P
Privet	<i>Ligustrum vulgare</i>	P
Red Alder	<i>Alnus rubra</i>	P
Red Maple	<i>Acer rubrum</i>	P
Saltcedar	<i>Tamarix pentandra</i>	P
Sassafras	<i>Sassafras albidum</i>	P
Sourwood <sup>6</sup>	<i>Oxydendrum arboreum</i>	P
Sweetgum	<i>Liquidambar styraciflua</i>	P
Sycamore	<i>Platanus occidentalis</i>	P
Tanoak <sup>4</sup>	<i>Lithocarpus densiflorus</i>	P
Tit <sup>10</sup>	<i>Cyrilla racemiflora</i>	P
Tree of Heaven	<i>Ailanthus altissima</i>	P
Vaccinium spp. Including: Blueberry Sparkleberry	<i>Vaccinium</i> spp. <i>Vaccinium arboreum</i>	P P
Water willow*	<i>Justicia americana</i>	P
Yellow poplar <sup>4</sup>	<i>Liriodendron tulipifera</i>	P

\*Use not permitted in California unless otherwise directed by supplemental labeling.

<sup>1</sup>Use higher labeled rate where heavy or well-established infestations occur.

<sup>2</sup>Growth Habit: A = Annual, B = Biennial, P = Perennial

<sup>3</sup>Use a minimum of 75 GPA.

<sup>4</sup>Use higher labeled rate.

<sup>5</sup>For best results, early post-emergence applications are required.

<sup>6</sup>Best control with applications before formation of Fall leaf color.

<sup>7</sup>Tank mix with glyphosate.

<sup>8</sup>Degree of control may be species dependent.

<sup>9</sup>For water oak (*Quercus nigra*), laurel oak (*Quercus laurifolia*), willow oak (*Quercus phellos*), and live oak (*Quercus virginiana*), use higher labeled rates.

<sup>10</sup>Suppression only.

#### AQUATIC WEED CONTROL

**Sharda Imazapyr IPA Salt 53.1% SL** may be applied for control of floating and emergent weeds (see the **AQUATIC WEEDS CONTROLLED** and **TERRESTRIAL WEEDS CONTROLLED** sections) in or near bodies of water which may be flowing, non-flowing, or transient. **Sharda Imazapyr IPA Salt 53.1% SL** may be applied to specified aquatic sites that include lakes, rivers, streams, ponds, seeps, drainage ditches, canals, reservoirs, swamps, bogs, marshes, estuaries, bays, brackish water, transitional areas between terrestrial and aquatic sites, and seasonal wet areas. Refer to the **RESTRICTIONS** section under the **PRODUCT INFORMATION** section for restrictions and instructions on **Aquatic Sites**.

Read and observe the following directions if aquatic sites are present in terrestrial non-crop areas and are part of the intended treatment area.

**Sharda Imazapyr IPA Salt 53.1% SL** must be applied to the emergent foliage of the target vegetation and has little to no activity on submerged aquatic weeds. Concentrations of **Sharda Imazapyr IPA Salt 53.1% SL** resulting from direct application to water are not expected to be of sufficient concentration nor duration to control target vegetation. Application must be made in such a way as to maximize spray interception by the target vegetation while minimizing the amount of over spray that enters the water.

This product does not control plants that have a majority of their foliage underwater or plants that are completely submerged.

**Product Application: Sharda Imazapyr IPA Salt 53.1% SL** must be applied with surface or helicopter application equipment in a minimum of 5 gals. of water per acre. When applying by helicopter, follow directions under the **AERIAL APPLICATIONS** section of this label, otherwise refer to section on **GROUND APPLICATIONS** when using surface equipment.

When applying **Sharda Imazapyr IPA Salt 53.1% SL** to moving bodies of water, applications must be made while traveling upstream to prevent concentration of this herbicide in water. **DO NOT** apply to bodies of water or portions of bodies of water where emergent and/or floating weeds do not exist.

**Large Application Areas/Oxygen Depletion:** When application is to be made to target vegetation that covers a large percentage of the surface area of impounded water, treating the area in strips may avoid oxygen depletion due to decaying vegetation. Oxygen depletion may result in the suffocation of some sensitive aquatic organisms. **DO NOT** treat more than one half of the surface area of the water in a single operation and wait at least 10 - 14 days between treatments. Begin treatment along the shore and proceed outward in bands to allow aquatic organisms to move into untreated areas.

Avoid wash-off of sprayed foliage by recreational boat backwash or spray boat for 1 hour after application.

Apply **Sharda Imazapyr IPA Salt 53.1% SL** at 1 - 3 pts. (16 – 48 fl. oz., 0.5 – 1.5 lb. a.e.) per acre depending on species present and weed density. Use the higher labeled rates for heavy weed pressure. Refer to **AQUATIC WEEDS CONTROLLED** and **TERRESTRIAL WEEDS CONTROLLED** sections of this label for specific rates.

**Sharda Imazapyr IPA Salt 53.1% SL** may be applied as a draw down treatment in areas described above. Apply **Sharda Imazapyr IPA Salt 53.1% SL** to weeds after water has been drained and allow 14 days before reintroduction of water.

Rate instructions are expressed in terms of product volume for broadcast applications and as a percent solution for directed applications including spot treatments. For percent solution applications, **DO NOT** apply more than 3 pints (48 fl. oz., 1.5 lbs. a.e. Imazapyr) **Sharda Imazapyr IPA Salt 53.1% SL** per acre per year .

#### Restrictions:

- **DO NOT** apply more than 48 fl. oz. (1.5 lb. ai) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre per year.
- **DO NOT** apply more than 48 fl. oz (1.5 lb. a.e.) of **Sharda Imazapyr IPA Salt 53.1% SL** per acre per application.
- **DO NOT** apply more than 6 applications per year at reduced rates.
- **DO NOT** make applications less than 14 days apart.
- **New York State:** No application to aquatic sites.
- **Aerial Application** - Aerial application to aquatic sites is restricted to helicopter only.
- **Irrigation Water** - Application to water used for irrigation that results in residues greater than 1 part per billion (ppb) **must not** be used for irrigation purposes for 120 days after application or until residue levels of this product are determined by laboratory analysis or other appropriate means of analysis to be 1 ppb or less. When applications are made within 500 feet of an active irrigation intake, **DO NOT** irrigate for at least 24 hours following application to allow for dissipation.
- **Quiescent or Slow-Moving Waters** - In lakes and reservoirs, **DO NOT** apply this product within 1 mile of an active irrigation water intake during the irrigation season. Applications less than 1 mile from an active irrigation water intake may be made during the off-season, provided that the irrigation intake will remain inactive for a minimum of 120 days after application or until residue levels of this product are determined by laboratory analysis or other appropriate means of analysis to be 1 ppb or less.
- **Restrictions for Potable Water Intakes** - **DO NOT** apply this product directly to water within 0.5 mile upstream of an active potable water intake in flowing water (i.e., river, stream, etc.) or within 0.5 mile of an active potable water intake in a standing body of water including a lake, pond, or reservoir. To make aquatic applications around and within 0.5 mile of active potable water intakes, the water intake must be turned off during application and for a minimum of 48 hours after the application. These aquatic applications may be made only in the cases where there are alternative water sources or holding ponds that would permit the turning off of an active potable water intake for a minimum period of 48 hours after the applications. **NOTE:** Existing potable water intakes that are no longer in use, including those replaced by connections to wells or a municipal water system, are not considered to be active potable water intakes. This restriction does not apply to intermittent, inadvertent overspray of water in terrestrial use sites.
- **Permitting** - Consult local State fish and game agency and water control authorities before applying this product to public water. Permits may be required to treat such water.
- **Public Waters** - Application of this product to water can only be made by Federal or State agencies, including Water Management District personnel, municipal officials, and the U.S. Army Corps of Engineers, or those applicators who are licensed or certified as aquatic pest control applicators and are authorized by the State or local government. Treatment to other than non-native invasive species is limited to only those plants that have been determined to be a nuisance by a Federal or State government entity.
- **Private Waters** - Applications may be made to private waters that are still, including ponds, lakes, and drainage ditches where there is minimal or no outflow to public waters.
- **Recreational Use of Water in Treatment Area** - There are no restrictions on the use of water in the treatment area for recreational purposes, including swimming and fishing.
- **Livestock Use of Water in/from Treatment Area** - There are no restrictions on livestock consumption of water from the treatment area.

#### Mixing Guide

% Solution	Product per Gallon of Mix (Fl. Oz.)
0.25	0.3
0.5	0.6

#### Measuring Chart

128 fluid ounces	=	1 gallon
16 fluid ounces	=	1 pint
8 pints	=	1 gallon

1	1.3
2	2.6
3	3.8
5	6.4

4 quarts	=	1 gallon
2 pints	=	1 quart

Sharda Imazapyr IPA Salt 53.1% SL will control the following target species as specified in the **Use Rates and Application Directions** section of the table:

AQUATIC WEEDS CONTROLLED		
Floating Weeds		
Common Name	Scientific Name	Use Rates and Application Directions
*Floating Heart	<i>Nymphodes</i> spp.	1 - 2 pts./A (0.5 – 1 lb. a.e./A) applied in 100 GPA water mix. Ensure 100% coverage of actively growing emergent foliage.
*Frogbit	<i>Limnobium spongia</i>	0.5 - 1 pt./A (0.25 – 0.5 lb. a.e./A) applied in 100 GPA water mix. Ensure 100% coverage of actively growing emergent foliage.
*Spatterdock	<i>Nuphar luteum</i>	Apply a tank mix of 1 - 2 pts./A (0.5 – 1 lb. a.e./A) of <b>Sharda Imazapyr IPA Salt 53.1% SL</b> plus 4 - 6 pts./A glyphosate in 100 GPA water for best control. Ensure 100% coverage of actively growing emergent foliage.
*Water Hyacinth	<i>Eichhornia crassipes</i>	0.5 - 1 pt./A (0.25 – 0.5 lb.a.e./A) applied in 100 GPA water to actively growing foliage.
*Water Lettuce	<i>Pistia stratiotes</i>	0.5 - 1 pt./A (0.25 – 0.5 lb. a.e./A) applied in 100 GPA water mix. Ensure 100% coverage of actively growing emergent foliage.
Emerged Weeds		
Common Name	Scientific Name	Use Rates and Application Directions
*Alligatorweed	<i>Alternanthera philoxeroides</i>	0.5 - 2 pts./A (0.25 – 1 lb. a.e./A) applied in 100 GPA water mix. Ensure 100% coverage of actively growing emergent foliage.
*Arrowhead, Duck Potato	<i>Sagittaria</i> spp.	0.5 - 1 pt./A (0.25 – 0.5 lb. a.e./A) applied to 100 GPA water mix. Ensure 100% coverage of actively growing emergent foliage.
*Bacopa Lemon	<i>Bacopa</i> spp.	0.5 - 1 pt./A (0.25 – 0.5 lb. a.e./A) applied in 100 GPA water mix. Ensure 100% coverage of actively growing emergent foliage.
*Parrot Feather	<i>Myriophyllum aquaticum</i>	Foliage must be above water for sufficient product uptake. Apply 1 - 2 pts./A (0.2 - 0.5% solution) (0.5 – 1 lb. a.e./A) of <b>Sharda Imazapyr IPA Salt 53.1% SL</b> to actively growing emergent foliage.
*Pennywort	<i>Hydrocotyle</i> spp.	0.5 - 1 pt./A (0.25 – 0.5 lb. a.e./A) applied in 100 GPA water mix. Ensure 100% coverage of actively growing emergent foliage.
*Pickerelweed	<i>Pontederia cordata</i>	1 - 1.5 pts./A (0.5 – 0.75 lb. a.e./A) applied in 100 GPA water mix. Ensure 100% coverage of actively growing emergent foliage.
*Taro Wild Coco Yam Dasheen Elephant's Ear	<i>Colocasia esculentum</i>	2 - 3 pts./A (1 – 1.5 lb. a.e./A) applied in 100 GPA with a high-quality sticker adjuvant. Ensure good coverage of actively growing emergent foliage.
*Water Chestnut	<i>Trappa natans</i>	2 - 3 pts./A (1 – 1.5 lb. a.e./A) applied in 100 GPA with a high-quality sticker adjuvant. Ensure good coverage of actively growing emergent foliage.
*Water Lily	<i>Nymphaea odorata</i>	1 - 1.5 pts./A (0.5 – 0.75 lb. a.e./A) applied in 100 GPA water mix. Ensure 100% coverage of actively growing emergent foliage.
*Water Primrose	<i>Ludwigia uruguayensis</i>	2 - 3 pts./A (1 – 1.5 lb. a.e./A) (0.5 - 0.75% solution). Ensure 100% coverage of actively growing emergent foliage.
Terrestrial/Marginal Weeds		
Common Name	Scientific Name	Use Rates and Application Directions
*Aquatic Nightshade, Soda Apple	<i>Solanum tampicense</i>	1 pt./A (0.25% solution) (0.5 lb. a.e./A) applied to foliage.
*Bamboo Japanese	<i>Phyllostachys</i> spp.	1.5 - 2 pts./A (0.375 - 0.5% solution) (0.75 – 1 lb. a.e./A) applied to foliage.
*Beach Vitex	<i>Vitex rotundifolia</i>	Spot Treatment: 2.5% solution plus 1% MSO foliar spray. 8.5% solution stem injection (hack and squirt).
Brazilian Pepper Christmasberry	<i>Schinus terebinthifolius</i>	1 - 2 pts./A (0.25 - 0.5% solution) (0.5 – 1 lb. a.e./A) applied to foliage.
Cattail	<i>Typha</i> spp.	1 - 2 pts./A (0.25 - 0.5% solution) (0.5 – 1 lb. a.e./A) applied to actively growing green foliage after full leaf elongation. Lower rates will control cattail in the North. Higher rates are needed in the South.
Chinese Tallow Tree	<i>Sapium sebiferum</i>	0.5 – 0.75 pts./A (0.25 – 0.38 lb. a.e./A) applied to foliage
Cogongrass	<i>Imperata cylindrical</i>	Burn foliage, till area, then Fall spray 1 qt./A (0.5% solution) (2 lb. a.e./A) of <b>Sharda Imazapyr IPA Salt 53.1% SL</b> plus MSO applied to new growth.
Cordgrass, Prairie	<i>Spartina</i> spp.	2 - 3 pts./A (0.5 - 0.75% solution) (1 – 1.5 lb. a.e./A) applied to actively growing foliage.
*Cutgrass	<i>Zizaniopsis miliacea</i>	2 - 3 pts./A (0.5 - 0.75% solution) (1 – 1.5 lb. a.e./A) applied to actively

		growing foliage.
*Elephant Grass Napier Grass	<i>Pennisetum purpureum</i>	1.5 pts./A (0.375% solution) (0.75 lb. a.e./A) applied to actively growing foliage.
*Flowering Rush	<i>Butomus umbellatus L.</i>	1 - 1.5 pts./A (0.25 - 0.375% solution) (0.5 – 0.75 lb. a.e./A) applied to actively growing foliage.
Giant Reed Wild Cane	<i>Arundo donax</i>	2 - 3 pts./A (0.5 - 0.75% solution) (1 – 1.5 lb. a.e./A) applied in Spring to actively growing foliage.
*Golden Bamboo	<i>Phyllostachys aurea</i>	1.5 - 2 pts./A (0.375 - 0.5% solution) (0.75 – 1 lb. a.e./A) applied to foliage when plant is actively growing, before setting seedhead. More foliage will result in greater herbicide uptake, resulting in greater root kill.
Junglerice	<i>Echinochloa colonum</i>	1.5 - 2 pts./A (0.375 - 0.5% solution) (0.75 – 1 lb. a.e./A) applied to actively growing foliage.
Knapweed	<i>Centaurea spp.</i>	<b>Russian knapweed:</b> 1 - 1.5 pts./A (0.25 - 0.375% solution) (0.5 – 0.75 lb. a.e./A) plus 1 qt./A (0.5% solution) MSO Fall applied after senescence begins.
Knotweed, Japanese	<i>Polygonum cuspidatum</i> <i>Fallopia japonica</i>	1.5 - 2 pts./A (0.375 - 0.5% solution) (0.75 – 1 lb. a.e./A) applied post-emergence to actively growing foliage.
Melaleuca Paperbark Tree	<i>Melaleuca quinquenervia</i>	<b>Established Stands:</b> Apply 3 pts./A (0.75% solution) (1.5 lb. a.e./A) of <b>Sharda Imazapyr IPA Salt 53.1% SL</b> plus 6 pts./A (1.5% solution) glyphosate plus spray adjuvant. For best results use 4 qts./A (2% solution) MSO as an adjuvant.  <b>Broadcast Foliar Control:</b> Apply aerially in a minimum of 2 passes at 10 gals./A applied cross treatment.  <b>Spot Treatment:</b> Use 12.5% of <b>Sharda Imazapyr IPA Salt 53.1% SL</b> plus 25% solution of glyphosate plus 1.25% MSO in water applied as a frill or stump treatment.
*Nutgrass Kili'p'opu	<i>Cyperus rotundus</i>	1 pt./A (0.25% solution) (0.5 lb. a.e./A) <b>Sharda Imazapyr IPA Salt 53.1% SL</b> plus 1 qt./A (0.5% solution) MSO applied early post-emergence.
*Nutsedge	<i>Cyperus spp.</i>	1 - 1.5 pts./A (0.25 - 0.375% solution) (0.5 – 0.75 lb. a.e./A) post-emergence to foliage or pre-emergence incorporated, non-incorporated pre-emergence applications will not control.
Phragmites Common Reed	<i>Phragmites australis</i>	2 - 3 pts./A (0.5 - 0.75% solution) (1 – 1.5 lb. a.e./A) applied to actively growing green foliage after full leaf elongation. Ensure 100% coverage. If stand has a substantial amount of old stem tissue, mow or burn, allow to regrow to approximately 5 ft. tall before retreatment.  Lower rates will control phragmites in the North, higher rates are needed in the South.
*Poison Hemlock	<i>Conium maculatum</i>	1 pt./A (0.25% solution) (0.5 lb. a.e./A) <b>Sharda Imazapyr IPA Salt 53.1% SL</b> plus 1 qt./A (0.5% solution) MSO applied pre-emergence to early post-emergence to rosette before flowering.
Purple Loosestrife	<i>Lythrum salicaria</i>	0.5 pt./A (0.125% solution) (0.25 lb. a.e./A) applied to actively growing foliage.
Reed Canarygrass	<i>Phalaris arundinacea</i>	1.5 - 2 pts./A (0.375 - 0.5% solution) (0.75 – 1 lb. a.e./A) applied to actively growing foliage.
Rose, Swamp	<i>Rosa palustris</i>	1 - 1.5 pts./A (0.25 - 0.375% solution) (0.5 – 0.75 lb. a.e./A) applied to actively growing foliage.
Russian Olive	<i>Elaeagnus angustifolia</i>	1 - 2 pts./A (0.5% solution) (0.5 – 1 lb. a.e./A) applied to foliage.
Saltcedar Tamarisk	<i>Tamarix spp.</i>	<b>Aerial Application:</b> 1 qt. (2 lb. a.e.) <b>Sharda Imazapyr IPA Salt 53.1% SL</b> plus 0.25% v/v NIS applied to actively growing foliage during flowering.  <b>Spot Treatment:</b> Use 0.5% solution of <b>Sharda Imazapyr IPA Salt 53.1% SL</b> plus 0.25% v/v NIS and spray to wet foliage. After application, wait at least 2 years before disturbing treated Saltcedar. Earlier disturbance can reduce overall control.
Smartweed	<i>Polygonum spp.</i>	1 pt./A (0.25% solution) (0.5 lb. a.e./A) applied early post-emergence.
Sumac	<i>Rhus spp.</i>	1 - 1.5 pts./A (0.25 - 0.375% solution) (0.5 – 0.75 lb. a.e./A) applied to foliage.
Swamp Morningglory Kangkong Water Spinach	<i>Ipomoea aquatic</i>	0.5 - 1 pt./A (0.125 - 0.25% solution) (0.25 – 0.5 lb. a.e./A) of <b>Sharda Imazapyr IPA Salt 53.1% SL</b> plus 1 qt./A (0.5% solution) MSO applied early post-emergence.
Torpedo Grass	<i>Panicum repens</i>	2 pts./A (0.5 - 0.375% solution) (1 lb. a.e./A). Ensure good coverage to actively growing foliage.



*White Top Hoary Cress	<i>Cardaria draba</i>	0.5 - 1 pt./A (0.125 - 0.25% solution) (0.25 – 0.5 lb. a.e./A) applied in Spring to foliage during flowering.
Willow	<i>Salix spp.</i>	1 - 1.5 pts./A (0.25 - 0.375% solution) (0.5 – 0.75 lb. a.e./A) of <b>Sharda Imazapyr IPA Salt 53.1% SL</b> applied to actively growing foliage. Ensure good coverage.
*Use not permitted in California unless otherwise directed by supplemental labeling.		

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE: DO NOT** store below 10°F.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used 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 in proper disposal methods.

### CONTAINER HANDLING:

**[Less Than or Equal to 5 Gallons]** [Nonrefillable container. **DO NOT** reuse or refill this container. Offer for recycling if available. 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 reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.]

**[Greater Than 5 Gallons]** [Nonrefillable container. **DO NOT** reuse or refill this container. Offer for recycling, if available. 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. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration.]

**[For Bulk and Mini-Bulk Containers]** [Refillable container. Refill this container with pesticide only. **DO NOT** use this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by State and local authorities.]

## CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Sharda USA LLC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Sharda USA LLC and Seller harmless for any claims relating to such factors.

Sharda USA LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or Sharda USA LLC and Buyer and User assume the risk of any such use. To the extent consistent with applicable law, SHARDA USA LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, neither Sharda USA LLC nor Seller shall be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SHARDA USA LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SHARDA USA LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

Sharda USA LLC and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of Sharda USA LLC.