

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

November 10, 2021

Frank E. Sobotka, PhD IPM Resources LLC c/o Gharda Chemicals International Inc. 760 Newton-Yardley Rd., Suite 110 Newtown, PA 18940

Subject: Registration Review Label Amendments for Atrazine Mitigation Measures from the Interim Decision and the Technical Registrants' Commitments for the Endangered Species Act (ESA) Biological Evaluation *Product Name*: STRATOS DICAMBA+ATRAZINE AGRICULTURAL HERBICIDE *EPA Registration Number*: 93182-11 *Application Date*: 11/11/2020 *Decision Number*: 570036

Dear Dr. Sobotka:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Atrazine Interim Decision and with the technical registrants' commitments for the ESA Biological Evaluation. The Agency has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

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.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved

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labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

If you have any questions about this letter, please contact Samantha Thomas at <u>Thomas.samantha@epa.gov</u>.

Sincerely,

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Linda Arrington, Branch Chief Risk Management and Implementation Branch 4 Pesticide Re-Evaluation Division Office of Pesticide Programs

Enclosure

MASTER LABEL RE-FORMAT PER ESA INTERIM RR DECISION LABEL BOOKLET/FRONT CONTAINER LABEL BOOKLET (REMOVABLE LABEL BOOKLET] - (REV 11/11/2021)

Restricted Use Pesticide

Due to Ground and Surface Water Concerns

For retail sale to and use only by certified applicators or persons under their direct supervision, and only for those uses covered by the certified applicator's certification.

7 HERBICIDE

ATRAZINE

GROUP 5 HERBICIDE

GROUP

STRATOS[®]

Dicamba + Atrazine Agricultural Herbicide

For Weed Control in Corn, Grain Sorghum, and Fallow Systems.

Nov 10, 2021 Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under

ACCEPTED

EPA Reg. No. 93182-11

Active Ingredients:	
Potassium salt of dicamba (3,6-dichloro-o-anisic acid)*	
Atrazine**	21.92%
Inert Ingredients:	<u>64.63%</u>
TOTAL	100.00%

* This product contains 11.47% 3,6-dichloro-<u>o</u>-anisic acid (dicamba), which equals 1.1 pounds per gallon (132 g/L), or 0.14 pounds per pint.

** This product contains 21.92% 2-chloro-4-ethylamino-6-isopropyl/amino-s-triazine (atrazine), which equals 2.1 pounds per gallon (252 g/L), or 0.26 pounds per pint.

This labeling must be in the possession of the user at the time of the pesticide application.

Refer to inside Label Booklet for Precautionary information including Directions for Use.

SHAKE BEFORE USING Keep Out of Reach of Children CAUTION

EPA Reg. No. 93182-11 EPA Est. No. [tba]

Gharda Chemicals International Inc. 760 Newtown-Yardley Rd. Suite 110 Newtown, PA 18940 1-215-968-9474

Net Contents : ____ Gallons (____ Liters)

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PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals

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

FIRST AID		
If inhaled:	 Remove person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice. 	
If on Skin or clothing:	 Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advise. 	
If In eyes:	 Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advise. 	
If swallowed:	 Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless told to do so by the poison control center or doctor. DO NOT give anything by mouth to an unconscious person. 	

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

For emergency medical treatment information call PROSAR at: 1 (866) 359-5660

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are barrier laminate or nitrile rubber or neoprene rubber or viton.

All pilots and flaggers must wear: Long-sleeved shirt and long pants, shoes plus socks. In addition to the PPE above, ground boom applicators must also wear Category E chemical-resistant glove types made of (barrier laminate, nitrile rubber \geq 14 mils, neoprene rubber \geq 14 mils, or viton \geq 14 mils) material.

All mixers, loaders, other applicators, and other handlers must wear: Long-sleeved shirt and long pants, shoes plus socks, chemical-resistant Category E glove types (barrier laminate, nitrile rubber \geq 14 mils, neoprene rubber \geq 14 mils, or viton \geq 14 mils) and chemical-resistant apron when mixing, loading, or cleaning equipment or spills, and a NIOSH-approved respirator with an organic vapor (OV) removing cartridge with any combination N, R, or P filter (NIOSH approval number prefix **TC-84A**); or an OV canister (NIOSH approval prefix TC-14G; or a powered air purifying respirator (PAPR) with HE filters (NIOSH approval prefix TC-23C.) It is recommended that you require the respirator wearer to be tested and trained in the use, maintenance, and limitations of the respirator. See engineering controls for additional requirements.

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

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

See engineering controls for additional requirements

ENGINEERING CONTROLS

Mixers and loaders supporting aerial applications **at a rate greater than 3 lbs ai/A** must use a closed system that meets the requirements for dermal protection listed in the Worker Protection Standard (WPS) for Agricultural Pesticides [40 CFR 170.240(d)(4) and must:

- wear the personal protective equipment required for mixers and loaders,
- ware protective eye wear if the system operates under pressure, and
- be provided and have immediately available for use in an emergency, such as a spill or equipment breakdown: chemical resistant footwear.

Pilots must use an enclosed cockpit in a manner that is consistent with the WPS for Agricultural Pesticides [40 CFR 170.240(d)(6)]. Pilots must wear the PPE required on this labeling for applicators, however, they need not wear chemical-resistant gloves when using an enclosed cockpit.

Flaggers supporting aerial applications must use an enclosed cab that meets the definition on the Worker Protection Standard for Agricultural Pesticides (40 CFR 170.240(d)(5)] for dermal protection.

When applicators use enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(5)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/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

Stratos Herbicide contains Atrazine. Atrazine can travel (seep or leach) through soil and can enter ground water, which may be used as drinking water. Users are advised not to apply Atrazine to sand and loamy sand soils where the water table (ground water) is close to the surface and where these soils are very permeable, i.e., well-drained. Your

local agricultural agencies can provide further information on the type of soil in your area and the location of ground water.

NON-TARGET ORGANISM ADVISORY STATEMENT: This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of nontarget organisms by following label directions intended to minimize spray drift.

GROUND SURFACE WATER ADVISORY:

Stratos contains the active ingredient Atrazine. Atrazine can leach through soil and has been found to result in contamination of water supplies by way of groundwater.

Growers are advised to avoid use of Stratos Herbicide in well-drained loamy sand to sand soils, particularly in areas having high groundwater tables. Consult with your state or county extension agent for alternative recommendations such as a combination with a non-triazine herbicide.

Check valves or anti-siphoning devices must be used on all mixing equipment to prevent back-siphoning into wells or bulk storage tanks. *See the Storage and Disposal section* at the end of this booklet regarding proper disposal of excess pesticide, spray mixtures and rinsates.

ENVIRONMENTAL RESTRICTIONS

Stratos Herbicide must not be mixed or loaded within 50 feet of intermittent streams and rivers, natural or impounded lakes and reservoirs. **DO NOT** apply Stratos Herbicide within 66 feet of points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 feet of natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66-foot buffer or setback from runoff entry points must be cropped, seeded with grass, or planted with another suitable crop.

DO NOT mix, load or apply Stratos within 50 feet of all wells, including abandoned wells, drainage wells, and sink holes. Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 ft. of any well are prohibited, unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or wash water, and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or form the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above-specified minimum containment capacities **DO NOT** apply to vehicles when delivering pesticide to the mixing/loading sites.

One of the following practices must be employed when applying Atrazine to tileoutletted terraced fields containing standpipes:

• Make applications within 66 feet of standpipes in tile-outletted terraced fields, or

- Apply this product to the entire tile-outletted terraced field and immediately incorporate it to a depth of 2 3 inches in the entire field.
- Apply this product to the entire tile-outletted terraced field under a no-till practice only when a high crop residue management program is practiced. High crop residue management is described as a crop management practice where little, or no crop residue is removed from the field during and after crop harvest.

Note: This pesticide is toxic to aquatic invertebrates. **DO NOT** apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high-water mark. **DO NOT** apply when weather conditions favor drift from treated areas. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. **DO NOT** contaminate water when disposing of equipment wash water.

Additional State imposed requirements regarding well-head setbacks and operational area containment must be observed.

PRODUCT USE INFORMATION

Stratos is intended for control and suppression of annual broadleaf and perennial broadleaf weeds. Stratos may be applied preplant through early post-emergence on field corn, seed corn, popcorn and silage corn, early post-emergence on grain sorghum, and as a post-harvest treatment in fallow (wheat/fallow/wheat) and eco-fallow (wheat/corn or sorghum/fallow) rotations.

DIRECTIONS FOR USE

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

This labeling must be in the possession of the user at the time of pesticide application.

Endangered Species

It is a Federal offense to use any pesticide in a manner that results in an unauthorized "take" (e.g., kill or otherwise harm) of an endangered species under the Endangered Species Act section 9. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product. You must obtain a Bulletin no earlier than six months before using this product. To obtain Bulletins, consult http://www.epa.gov/espp/, call 1-844-447-3813, or email ESPP@epa.gov. You must use the Bulletin valid for the month in which you will apply the product.

ANY USE OF THIS PRODUCT IN AN AREA WHERE USE IS PROHIBITED IS A VIOLATION OF FEDERAL LAW. Before using this product, you must consult the Atrazine Watershed Information Center (AWIC) to determine whether the use of this product is prohibited in your watershed. AWIC can be accessed through [www.atrazine-watershed.info], or [1-866-365-3014]. If use of this product is prohibited in your watershed, you may return this product to your point of purchase or contact Gharda Chemicals International Inc. for a refund.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the Agency responsible for pesticide regulation.

Before applying Stratos, read all directions and precautions appearing on the container label and this booklet. Failure to follow all directions and precautions may result in unsatisfactory weed control, crop injury, or illegal residues.

AGRICULTURAL USE REQUIREMENTS

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

DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

Exception: If the product is soil injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

- PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:
- coveralls worn over short-sleeve shirt and short pants
- chemical-resistant footwear plus socks
- chemical-resistant Category E glove type (barrier laminate, nitrile rubber ≥ 14
- mils, neoprene rubber \geq 14 mils, or Viton \geq 14 mils)
- chemical-resistant headgear for overhead exposure
- protective eyewear

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

RESTRICTIONS:

- **DO NOT** apply this product through any type of irrigation system.
- DO NOT contaminate irrigation ditches or water used for domestic purposes.
- When tank mixing or sequentially applying Atrazine or products containing Atrazine to crops other than corn or sorghum, the total pounds of Atrazine applied (Ib. ai/A) must not exceed the specific seasonal rate limits as noted in the use directions.
- Not for use in the Conservation Reserve Program (CRP) land.
- Not for use in the States of Hawaii or Alaska, or in the U.S. Territories (Puerto Rico, Guam, American Samoa, the U.S. Virgin Islands, and the North Mariana Islands).
- Use on roadsides; Conservation Reserve Program (CRP) land; conifers, including Christmas Tree plantings; timber; forestry; and Miscanthus and other perennial bioenergy crops is prohibited.
- Where there are state/local requirements regarding atrazine use (including lower maximum rates and/or higher setbacks), which are different from the label, the more restrictive/protective requirements apply.

Spray Drift Management for Ground and Aerial Applications

Mandatory Spray Drift

Aerial Applications

- **DO NOT** release spray at a height greater than 10 ft above the ground or vegetative canopy unless a greater application height is necessary for pilot safetv.
- For all applications, applicators are required to use a coarse or coarser spray droplet size (ASABE S572).
- If the windspeed is 10 miles per hour or less, applicators must use 1/2 swath displacement upwind at the downwind edge of the field. When the windspeed is between 11 - 15 miles per hour, applicators must use 3/4swath displacement upwind at the downwind edge of the field. Do not apply when wind speeds exceed 15 mph at the application site. If the windspeed 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 the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.

User must maintain a 150 foot (46 m) in-field downwind buffer (in the direction in which the wind is blowing) from the edge of streams and rivers, as well as high-tide line for all estuarine/marine environments.

DO NOT apply during temperature inversions.

Ground Boom Applications

- User must maintain a 15 foot (4.6 m) in-field downwind buffer (in the direction in which the wind is blowing) from the edge of streams and rivers, as well as high-tide line for all estuarine/marine environments.
- For all applications, applicators are required to use a coarse or coarser spray droplet size (ASABE S572).
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the • application site.
- **DO NOT** apply during temperature inversions.
- User must only apply with the release height recommended by the manufacture, but no more than 4 feet above the ground or crop canopy. **Boomless Ground Applications:**

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- Applicators are required to use a coarse or coarser droplet size (ASABE S572.1) for all applications.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- User must maintain a 15 foot (4.6 m) in-field downwind buffer (in the • direction in which the wind is blowing) from the edge of streams and rivers. as well as high-tide line for all estuarine/marine environments.
- **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 recommended 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 manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight

BOOM HEIGHT - Ground Boom

For ground equipment, the boom should 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.

• 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.

Handheld Technology Applications:

Take precautions to minimize spray drift.

Boomless Ground Applications:

Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

Mixing and Application

Stratos is a water-dispersible formulation that can be mixed and applied in water on corn, sorghum, or fallow. Sprayable fluid fertilizer may be used for preemergence application on corn. Fluid fertilizer may damage corn if applied after corn emergence. If a fluid fertilizer will be used, a compatibility test (see Compatibility Test) should be made prior to tank mixing.

Ground or aerial application equipment which will give good spray coverage of weed foliage should be used.

Rainfall or irrigation occurring within 4 hours after postemergence applications may reduce the effectiveness of Stratos.

Apply 10 to 50 gallons of diluted spray per treated acre when using ground application equipment or 2 to 10 gallons of diluted spray per treated acre when using aerial application equipment. Use the higher spray volumes when treating dense or tall vegetation.

Stratos should not be applied during periods of gusty wind or when wind is in excess of 15 mph as uneven spray coverage may occur.

Sensitive Crop Protection

Stratos may cause injury to desirable broadleaf plants or trees when contacting their roots, stems or foliage. To avoid potential off-target herbicide movement:

- **DO NOT** apply Stratos in the general vicinity of tobacco, tomatoes, or other highly sensitive plants.
- **DO NOT** use aerial applications if broadleaf crops are growing in the vicinity of the area to be treated.
- **DO NOT** make applications when winds are moving toward sensitive crops, inversions are present, or high temperatures (above 85°F) are expected on the day of application.
- Use nozzles designed to produce large spray droplets such as Delavan Raindrops, Spraying Systems XR flat fans or large capacity flood nozzles such as Delavan D-10, Spraying Systems TK-10 or greater capacity. Use spray pressure of 30 psi or less and 10 gpa or more, unless otherwise required by the manufacturer of drift reducing nozzles.
- An agriculturally approved drift control agent may be added to further reduce the potential of physical drift at the time of application.

Consult your state and local authorities for possible other application restrictions and advice.

Tank Mixing

To ensure uniform mixture when Stratos is tank mixed with one or more other products, follow this procedure:

- Fill the spray tank approximately one-third full of water and with the agitator operating, add the recommended amount of ingredients using the following order: dry formulations (e.g. wettable powders, dry flowables) first and liquid suspensions (e.g. flowables) next.
- Mix thoroughly and fill the tank to one-half full of continuous agitation.
- Add emulsifiable concentrate formulations last while maintaining agitation.
- Complete filling the spray tank with water.

- If a surfactant is to be used, add it last.
- If a drift control agent is to be used, follow the directions for mixing on the specific product label.

Band Treatments

Stratos may be applied as a band treatment. Use the formulas below to determine the appropriate rate and volume per acre.

Band Width i <u>n inches</u> Row width in inches	X	Broadcast RATE per treated acre	=	Band RATE per treated acre
Band width <u>in inches</u> Row width in inches	Х	Broadcast VOLUME per treated acre	=	Band VOLUME per treated acre

Compatibility Test

Before mixing in the spray tank, it is advisable to test compatibility by mixing all components in a small container in proportionate quantities (see following table).

Amount of Component to Add to One Pint of Spray Carrier (Assuming Volume is 25 Gallons Per Acre)

Component	Rate	Level
Formulations	Per Acre	<u>Teaspoons</u>
Dry	1 lb.	1 1/2
Liquid	1 pt.	1/2

If components do not ball-up or form flakes, sludge, gels, oily films or layers, or other precipitates, then the tested spray mix is compatible. Usually, incompatibility in any of the above-described forms will occur within 5 minutes after mixing.

If components are incompatible, the use of an agriculturally approved compatibility agent is recommended. Rerun the above COMPATIBILITY TEST with a suitable compatibility agent (1/4 teaspoon per pint is equivalent to 2 pints per 100 gallons of fluid fertilizer).

Procedure for Cleaning Spray Equipment

Before preparing spray mixture, be sure all equipment is clean to prevent uneven applications, clogged nozzles, or crop injury. Thoroughly clean equipment following applications of Stratos. Avoid allowing dry sediment formation within spray tank.

The steps listed below are suggested for thorough cleaning of spray equipment following applications of Stratos or tank mixes of Stratos.

- 1. Hose down thoroughly the inside as well as outside surfaces of equipment while filling the spray tank half full of water. Preferably, inside surfaces should be rinsed using a multi-directional nozzle such as Spray Systems Tank Rinsing Nozzle 27500E-TEF®. Flush by operating sprayer until the system is purged of all rinse water.
- 2. Fill tank with water while adding a commercially available tank cleaning agent such as Nutra-Sol®, Incide-Out® or Loveland Tank and Equipment Cleaner®.

Carefully read and follow tank cleaning agent label directions. Operate the pump to circulate the cleaning solution through the sprayer system for 15 to 20 minutes and discharge a small amount through the boom and nozzles. Let the solution stand for several hours, preferably overnight.

- 3. Completely flush the cleaning solution out of the spray tank.
- 4. Remove nozzles and screens. Fill tank with clean water and circulate through the sprayer system for 15 to 20 minutes. Discharge a small amount through boom lines.
- 5. Completely flush rinse water out of the spray tank.

WEED CONTROL LIST

This is a general list of weed species which may be treated with Stratos as recommended under the rates and timing sections of specific crop uses listed in this label. Stratos, when applied at recommended rates, will control many ANNUAL broadleaf weeds and give growth suppression of many PERENNIAL broadleaf weeds including:

Annuals

Buckwheat, Wild **Burcucumber** Chickweed, Common Clover (Annual) Cocklebur, Common Cucumber, Wild Jimsonweed Kochia Kochia (Triazine Resistant) Kochia (Sulfonylurea Resistant) Ladysthumb Lambsquarters, Common Lambsquarters (Triazine Resistant) Mallow, Common Mallow, Venice Marestail Morning-glory, lvyleaf Morning-glory, Tall Mustard, Wild Mustard, (Yellowtops) Nightshade, Black

Perennials

Alfalfa Artichoke, Jerusalem Bindweed, Field Bindweed, Hedge Canada thistle Clovers, (Perennials) Dandelion, Common Dock, Broadleaf (Bitterdock) Dock, Curly Piqweed, Prostrate Pigweed, Redroot (Carelessweed) Pigweed, Rough Pigweed, Smooth Pigweed (Triazine Resistant) Pigweed, Tumble **Puncturevine** Purslane, Common Ragweed, Common (Buffaloweed) Ragweed, Giant Ragweed, Lance-Leaved Sicklepod Sida, Prickly (Teaweed) Smartweed, Green Smartweed, Pennsylvania **Spanishneedles** Spurge, Prostrate Sunflower, Common (Wild) Sunflower, Volunteer Tansymustard Thistle, Russian Velvetleaf Waterhemp

Dogbane, Hemp Horsenettle, Carolina Lespedeza Milkweed, Common Ragweed, Western Smartweed, Swamp Sowthistle Trumpet creeper Vetch

ROTATIONAL CROPS

To avoid potential injury to or illegal residues in rotational crops, use the following guidelines:

- In cases of treated crop failure, the area may be replanted to either corn or sorghum during the same cropping season. If corn is replanted, **DO NOT** apply Stratos until after emergence. Consult label of each product for application directions and **DO NOT** exceed the maximum yearly use rate for Stratos. If sorghum is the replanted crop Stratos can be used as a postemergence application follow each label's directions; **DO NOT** exceed the maximum yearly use rate.
- If applied after June 10th, rotation with crops other than corn or sorghum the following spring may result in crop injury.
- In the High Plains and inter-mountain areas of the West, where rainfall is sparse and erratic or where irrigation is required, use only when corn or sorghum is to follow corn or sorghum, or when a crop of untreated corn or sorghum is to precede other rotational crops.
- For soils containing a calcareous surface layer, such as those found in eastern parts of the Dakota's, Kansas, western Minnesota, and Nebraska, injury may occur to soybeans planted the year following application. On soils containing a calcareous surface layer, small grain injury could occur.
- Small grains may be planted 10 months following treatment. **DO NOT** plant sugar beets, tobacco, vegetables, (including dry beans), spring-seeded small grains, or small-seeded legumes and grasses the year following application, or injury may occur.



WEED RESISTANCE MANAGEMENT

For resistance management, please note that Stratos contains both a Group 7 Dicamba and Group 5 Atrazine herbicide. Any weed population may contain or develop plants naturally resistant to Stratos and other Group 7 and Group 5 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance-management strategies should be followed.

When herbicides affecting the same biological site of action are used repeatedly over several years to control the same weed species in the same field, naturally occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that field. Adequate control of these resistant weed biotypes cannot be expected. It may be necessary to retreat the problem area using a product affecting a different site of action, if weed control is unsatisfactory.

To better manage herbicide resistance through delaying the proliferation and possible dominance of herbicide resistant weed biotypes, it may be necessary to change cultural practices within and between crop seasons such as using a combination of tillage, retreatment, tank-mix partners and/or sequential herbicide applications that have a different site of action. Weed escapes that are allowed to go to seed will promote the spread of resistant biotypes.

It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes. Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for specific alternative cultural practices or herbicide recommendations available in your area.

Integrated Pest Management: This product may be used as part of an Integrated Pest Management (IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds.

To ensure that the proper herbicide is applied based on the weed species and growth stages, fields need identify for weed species present and their growth stage present to determine if the intended application of this product will be effective.

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

• Rotate the use of Stratos or other Group 7 and Group 5 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 weeds 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, biological, 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.
- 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 any incidence of non-performance of this product against a particular weed species to your Gharda Chemicals retailer, representative or call 1-(215) 968-9474.

CROP APPLICATIONS

CORN (Field, Seed, Silage, Popcorn)

Stratos may be applied prior to, during, or after planting, but before corn exceeds 8 inches tall. Stratos will control many ANNUAL broadleaf weeds or give growth suppression of many PERENNIAL broadleaf weeds commonly found in *corn* (*refer to GENERAL WEED LIST section of this booklet*).

Ctrates is not registered

- Stratos is not registered for use on sweet corn.
- **DO NOT** exceed 5 1/4 pints Stratos per acre per year (a total of 0.75 pounds dicamba and 1.37 pounds atrazine).
- The Preharvest Interval (PHI) for field corn forage is 60 days.

PRECAUTIONS

- Observe all previously noted precautions, mixing and application instructions for field and silage corn.
- **DO NOT** apply Stratos to seed corn or popcorn without first verifying with your local seed corn company (supplier) the selectivity of Stratos on your inbred line or variety of popcorn. This precaution will help avoid potential injury of sensitive varieties.
- Direct contact of Stratos with corn seed must be avoided in preplant or preemergence applications. If corn seeds are less than 1 1/2 inches below the soil surface, delay application until corn has emerged. Corn growing under stress conditions such as low temperatures, drought, poor fertility, excessive moisture, or foliar damage due to hail, wind or insects, can exhibit various injury symptoms that may be more pronounced if herbicides are applied.
- An agricultural approved surfactant, crop oil or sprayable fluid fertilizer (such as 1/2 1 gallon per acre of 28%, 30% or 32% urea ammonium nitrate), or ammonium sulfate (2 2 1/2 lbs. per acre) may be added to spray mix to improve postemergence weed control, particularly on drought stressed weeds.
- An agricultural approved surfactant, crop oil or sprayable fluid fertilizer (such as 1/2 -1 gallon per acre of 28%, 30% or 32% urea ammonium nitrate), or_ammonium sulfate (2 - 2 1/2 lbs. per acre) may be added to spray mix to improve postemergence weed control, particularly on drought stressed weeds.
- The use of adjuvants containing penetrants such as petroleum-based oils after corn emergence may cause crop injury.
- Corn may be harvested or grazed for feed once the crop has reached the ensilage (milk stage) or later in maturity.
- A maximum of two applications of Stratos may be applied to corn if made through the 5-leaf stage or 8 inches tall, whichever occurs first. Application must be separated by two weeks or more.
- Stratos may be applied before or after Oracle. Applications must be separated by two weeks or more. Maximum rate for sequential applications is Stratos at 3 1/2 pints per acre followed by Oracle at 1/2 pint or Oracle at 1 pint per acre followed by Stratos at 1 3/4 pints per acre.
- To reduce the amount of atrazine used per acre, Stratos at 2 pints per acre may be tank mixed with 1/2 pint per acre of Oracle. **Note: DO NOT** apply this tank mix on coarse textured soils or any soils with less than 2% organic matter prior to corn emergence.

Application Rates and Timings

Preplant and Preemergence in No Tillage Corn

Applications of Stratos may be made before, during or after planting for control of emerged and actively growing broadleaf weeds.

Apply Stratos at the rate of 3 1/2 pints per acre on medium or fine textured soils containing 2% or greater organic matter. Use 2 pints per acre on coarse soils, (sand, sandy loam and loamy sand) or medium and fine textured soils with less than 2% organic matter.

When planting into a legume sod (e.g., alfalfa or clover), apply Stratos after 4 - 6 inches of regrowth has occurred. For added control of dandelion or plantain, 2,4-D at 1/4 to 1/2 lbs. a.i. per acre may be tank mixed with Stratos.

Preemergence in Conventional or Reduce Tillage Corn

Stratos may be applied after planting and prior to corn emergence. Application of 3 1/2 pints per treated acre may be made to medium or fine textured soils, which contain 2% or greater organic matter. **DO NOT** apply to coarse textured soils (sand, loamy sand or sandy loam) or any soil with less than 2% organic matter until after corn emergence (see Early Postemergence uses below).

Preemergence application of Stratos does not require mechanical incorporation to become active. A shallow mechanical incorporation is recommended if application is not followed by adequate rainfall or sprinkler irrigation. Avoid tillage equipment (e.g. drags, harrows) which concentrate treated soil over seed furrow, as seed damage could result.

Early Postemergence (All Tillage Systems)

Stratos at 3 1/2 pints per treated acre may be applied during the period from corn emergence through 5 leaf stage or 8 inches tall, whichever occurs first. Reduce the rate to 2.0 pints per treated acre for corn grown on coarse textured soils (sand, sandy loam and loamy sand).

Overlay (Sequential Treatment)

Stratos may be applied to ground previously treated with one or more of the following herbicides:

	Maximum Rate	
	Per Treated Acre	
Herbicide	(Lbs. a.i.)	
Acetochlor (Surpass®, Harness® Plus)	3	
Alachlor (Lasso®)	4	
Atrazine*	*	
Butylate (Sutan+®)	6	
Cyanazine (Bladex®)	4	
Dimethenamid (Frontier®)	1 1/2	
EPTC (Eradicane®)	6	
Flumetsulan (Broadstrike®)	0.068	
Glyphosate (Roundup®)	5	
Metolachlor (Dual®)	3	
Paraquat (Gramoxone®)	1	
Pendimethalin (Prowl®)	2	
Propachlor (Ramrod®)	6	

* Maximum broadcast application rates for corn must be as follows:

- If no Atrazine was applied prior to corn/sorghum emergence, apply a maximum of 2 lb ai/A broadcast. If a postemergence treatment is required following an earlier herbicide application, the total Atrazine applied may not exceed 2.5 lb ai/A per calendar year.
- Apply a maximum of 2.0 lb ai/A as a single preemergence application on soils that are not highly erodible or on highly erodible soils if at least 30% of the soil is covered with plant residues; or apply a maximum of 1.6 lb ai/A as a single preemergence application on highly erodible soils if <30% of the surface is covered with plant residues; or 2.0 lb ai/A if only applied postemergence. **DO NOT** apply more than 2.0 lb ai/A per calendar year as a single preemergence application on soils that are not highly erodible

Read and follow the label of each of the above listed products for precautionary statements, directions for use and other restrictions.

Postemergence Treatment

Post emergence applications to corn must be made before crop reaches 12 inches in height.

Tank Mix Treatments

Stratos may be tank mixed with one or more of the following herbicides for control of grasses or additional broadleaf weeds. When tank mixing Stratos with other products, read the label of each tank mix partner for precautionary statements, directions for use and other restrictions. Also, read the *General Information Tank Mixing section* given earlier in this label.

Stratos plus Accent®

Application may be made after grass weed emergence but before corn is greater than 8 inches tall. Use 2/3 to 1 1/3 ounces of Accent 75DF per treated acre. Use a non-ionic surfactant at 0.25% v/v and sprayable fluid fertilizer (such as 28%, 30% or 32% urea ammonium nitrate at 4% v/v with this tank mixture.

Stratos plus Atrazine

Application may be made before corn exceeds 8 inches in height. Consult the maximum poundage of atrazine allowed *(See rate table above)* for maximum rates. For improved suppression of newly emerged annual grasses, crop oil concentrate may be added to this mixture if corn does not exceed 5 inches in height. **DO NOT** apply preemergence to peat, muck and high organic clay soils.

Stratos plus Bladex® (cyanazine)

Application may be made before grasses are 1 1/2 inches tall and the corn is not beyond the four-leaf stage. Use 1 1/4 - 4 lbs. a.i. Bladex per treated acre for preemergence and 1 1/4 - 2 lbs. a.i. for postemergence treatments. AFTER CORN EMERGENCE, USE ONLY THE BLADEX 90DF FORMULATIONS.

Stratos plus Dual® (metolachlor)

Application may be made until grasses reach the two-leaf stage and before corn is greater than 3 inches tall. Applications prior to crop emergence may only be made on medium to fine textured soils containing 2 1/2% or greater organic matter. Use 1 1/2 - 2 1/2 lbs. a.i. Dual per treated acre.

Stratos plus Frontier® (dimethenamid)

Apply Frontier at 13 - 25 fluid ounces per acre for preemergence grass control. Applications can be made during or after planting before corn exceeds 8 inches in height. This treatment must be combined with a herbicide that provides postemergence control of grass weeds if they are greater than 1 inch tall at the time of application. <u>Stratos plus Gramoxone® (paraguat)</u>

Application may be made to emerged weeds, but before corn emerges. Use 1/4 - 1 lb. a.i. Gramoxone per treated acre.

Stratos plus Surpass® or Harness® plus (acetochlor)

Apply Harness plus or Surpass at 1 1/2 - 3 pounds a.i. per acre. Applications may be made during or after planting and before corn emergence. Applications may only be made on medium or fine textured soils containing 2 1/2% or greater organic matter. <u>Stratos plus Lasso® (alachlor)</u>

Application may be made until grasses reach the two-leaf stage and before corn is greater than 3 inches tall. Applications prior to crop emergence may only be made to fine textured soils containing 2 1/2% or greater organic matter. Apply 2 1/2 - 3 lbs. a.i. Lasso per treated acre.

Stratos plus Prowl® (pendimethalin)

Application may be made after planting and before corn exceeds the two-leaf stage, and grass weeds are no more than one inch tall. Application prior to crop emergence should only be made on medium to fine textured soils containing 2 1/2% or greater organic matter. Use 3/4 to 1 1/2 lbs. a.i. Prowl per treated acre.

Stratos plus Roundup® (glyphosate)

Application may be made to emerged weeds, but before corn emerges. Use 1 - 3 lbs. a.i. Roundup per treated acre.

Stratos Plus Stinger® (clopyralid)

For annual broadleaf and Canada thistle weed control, applications may be made any time after corn emergence through 5 leaf or 8-inch-tall corn. Apply when the majority of the thistle plants have emerged and are at least 4 inches in height, but before bud stage. Use Stratos plus 1 1/2 - 3 fl oz/A Stinger through 8 inch or 5 leaf corn. Use higher rates listed for stand reduction of larger thistle plants or heavier infestations. Lower rates listed may provide seasonal thistle suppression only.

GRAIN SORGHUM

Stratos herbicide application in grain sorghum (milo) should be made between the 2-5 leaf stage (about 2-8 inch tall) of the sorghum. For best performance, make application when weeds are small (less than 3 inches tall) and actively growing. Stratos, when applied at the recommended rates and timings for grain sorghum, will control many ANNUAL broadleaf weeds (e.g. pigweed) and will reduce the competition from established PERENNIAL broadleaf weeds as well as control their seedlings. *(refer to the GENERAL WEED LIST section of this booklet).*

RESTRICTIONS

- Make no more than one application of Stratos per growing season.
- Dry Bulk Fertilizer restrict the impregnation of dry bulk commercial fertilizer to 340 tons per worker per day for no more than 30 days per calendar year for use of corn, sorghum, and sod.
- **DO NOT** apply atrazine and propazine products to the same sorghum acre.
- **DO NOT** apply to furrow planted sorghum until level (plowed in).
- Postemergence application must be made before sorghum reaches 8 inches in height.
- Delay harvest until 30 days after treatment.
- **DO NOT** apply Stratos to sorghum grown for seed production.
- Sorghum may be harvested or grazed for feed once the crop has reached the mature grain stage.
- Preemergent sorghum Preharvest Interval (PHI) is: 60 days
- Post emergent sorghum Preharvest Interval (PHI) is: 45 days

PRECAUTIONS

• Observe all previous noted Stratos precautions, mixing and application instructions.

- Applications of Stratos to sorghum during periods of rapid growth may result in temporary leaning of plants or rolling of leaves. These effects are usually outgrown within 10-14 days.
- On coarse soils, injury to sorghum may occur if heavy rain immediately follows application.

Application Rates

Broadcast rates per treated A of Sorghum: (1 1/2 to 2 pints). Use 1 1/2 pints Stratos for control of redroot pigweed that are less than 3 inches tall and are actively growing. Use 2 pints of Stratos for control of all other listed broadleaf weeds.

DO NOT add crop oil or any surfactant to growing sorghum unless possible crop injury is acceptable.

Stratos may be applied to ground previously treated with the following herbicides:

Herbicide	Maximum rate of listed compound per treated acre (lbs a.i.)	
Alachlor (Lasso®) (Screen®-treated seed)	4	
Atrazine	*	
Metolachlor (Dual®) (Concep®-treated seed)	2 1/2	
Propachlor (Ramrod®)	5	

* **Maximum pounds a.i. per treated acre for Atrazine*** Maximum broadcast application rates for sorghum must be as follows:

- If no Atrazine was applied prior to corn/sorghum emergence, apply a maximum of 2 lb ai/A broadcast. If a postemergence treatment is required following an earlier herbicide application, the total Atrazine applied may not exceed 2.5 lb ai/A per calendar year.
- Apply a maximum of 2.0 lb ai/A as a single preemergence application on soils that are not highly erodible or on highly erodible soils if at least 30% of the soil is covered with plant residues; or
- Apply a maximum of 1.6 lb ai/A as a single preemergence application on highly erodible soils if <30% of the surface is covered with plant residues; or 2.0 lb ai/A if only applied postemergence.

Read and follow the label of each of the above listed products for precautionary statements, directions for use and other restrictions.

Tank Mix Stratos plus Atrazine

Stratos may be tank mixed with atrazine for added residual or for grass control in sorghum.

Use tank mix on medium or fine soils only. Add 1/2 lb. a.i. atrazine per treated acre for added residual broadleaf weed control. Add 1 1/2 lbs. a.i. atrazine per treated acre for control of emerged grasses less than 1 1/2 inches tall. **DO NOT** add crop oil or surfactant to this combination or crop injury may result. Atrazine carryover may injure small grains

and broadleaf crops if the total rate of atrazine exceeds the rate recommended for that specific geographic area or crop rotation.

POST HARVEST ON FALLOW GROUND

Stratos may be applied from summer to fall after wheat harvest to fallow ground in WHEAT/FALLOW/WHEAT OR WHEAT/CORN/FALLOW OR WHEAT/SORGHUM/ FALLOW (Eco-Fallow) rotations. For Eco-Fallow system, plant corn or sorghum in spring after treatment with minimum soil disturbance. Use a surface planter or a planter leaving a shallow furrow. If weeds are present at planting, remove them with a sweep plow or other suitable implement before planting.

RESTRICTIONS

- **DO NOT** graze or feed sorghum forage from treated areas to livestock.
- **DO NOT** plant any crop other than those listed on this label within 18 months following treatment.

PRECAUTIONS

- Observe all previously noted Stratos precautions, mixing and application instructions,
- Agriculturally approved spray adjuvants such as surfactants, crop oil concentrates, or fluid fertilizers may be applied for use with Stratos when applied to emerged weeds postharvest on fallow ground.

Weeds Controlled

Stratos when applied at recommended rates and timings for fallow applications, will control many ANNUAL broadleaf weeds and will give growth suppression of many PERENNIAL broadleaf weeds as well as control their seedlings. *Refer to the General Weed List in the General Information section of this booklet for a complete list of weeds controlled.*

Rotational Crops

The application rates and timings in this label pertain to a cropping system of WHEAT/FALLOW/WHEAT (Post-Harvest Fallow) or WHEAT/CORN/FALLOW or WHEAT/SORGHUM/WHEAT (Eco-Fallow). If any other crop is to be substituted for wheat, corn, sorghum, or the fallow period, *refer to the Crop Rotation restrictions in the General Information section of this label.*

Rotational Crop Restriction

To avoid injury to crops planted after application(s) of Stratos, specific restrictions for post harvest fallow or eco-fallow application(s) are:

- 1. Use only on silt, loam or finer-textured soils.
- 2. **DO NOT** treat erodible hillsides, caliche, and rocky outcroppings, or exposed to calcareous subsoil.
- 3. **DO NOT** treat soils of the Rosebud and Canyon series in Western NE and adjoining counties in CO and WY.
- 4. **DO NOT** treat soils with calcareous surface layers.
- 5. Avoid overlapping spray swaths during treatment application.

WHEAT/FALLOW/WHEAT

Stratos may be used for WHEAT/FALLOW/WHEAT Systems in: CO, KS, ND, NE, SD & WY.

Rates and Timings

For preemergence or postemergence control or suppression of the weed species listed in this booklet, apply Stratos at 2 to 3 1/2 pints per treated acre as a broadcast treatment. For best performance, make application soon after wheat harvest prior to or soon after weed emergence. A split application of Stratos may be used, but only in the summer to fall after wheat harvest and may not exceed the maximum labeled rate of 3 1/2 pints per treated acre.

RESTRICTIONS:

For soils in South Dakota with a pH of 7.5 or greater:

- **DO NOT** apply more than 1.5 pounds active ingredient per acre for any application.
- **DO NOT** apply more than one application per year.
- For soils in South Dakota with a pH of less than 7.5:
- **DO NOT** apply more than 2.0 pounds active ingredient per acre for any application.
- **DO NOT** apply more than one application per year.

For all other locations:

- **DO NOT** apply more than 2.5 pounds active ingredient per acre for any application.
- **DO NOT** apply more than one application per year.

WHEAT/CORN/FALLOW OR WHEAT/SORGHUM/FALLOW (Eco-Fallow) Stratos may be used for WHEAT/CORN/FALLOW Systems in: CO, KS, ND, NE, SD, & WY, and, in WHEAT/SORGHUM/FALLOW Systems in: AR, CO, GA, IL, KS, LA, MS, MO, NE, NM, NC, OK, SD & TX.

Rates and Timings

Preemergence or Postemergence

For control of annual broadleaf or grass weeds following wheat and in to the following corn or sorghum crop (when grown under minimum tillage), apply 2 to 8½ pints/Acre of Stratos after wheat harvest. For best performance make application within 10 days following wheat harvest. Use the higher rates in the rate range for added grass control and longer residual weed control. A split application of Stratos may be used but only in summer to fall after wheat harvest and may not exceed the maximum labeled rate of 8½ pints/Acre (2.25 pounds atrazine/Acre).

RESTRICTIONS:

- **DO NOT** apply more than 2.25 pounds active ingredient per acre for any application.
- **DO NOT** apply more than one application per year.

Tank Mix Treatments

Post-Harvest Fallow and Eco-Fallow

Stratos may be tank mixed with one or more of the following herbicides for control of grasses or additional broadleaf weeds. When tank mixing Stratos with other products, read the label of each tank mix partner for precautionary statements, directions for use and other restrictions.

Stratos plus Oracle® or Oracle® Advanced

Ortacle or Oracle Advanced Herbicide at 1 pint per treated acre may be tank mixed with Stratos for additional suppression of broadleaf perennial species that are actively growing at the time of application.

Stratos plus 2,4-D

2,4-D amine or ester at 1/8 to 1 lb. a.i. per treated acre may be tank mixed with Stratos for improved postemergence burndown of annual or perennial broadleaf weeds. Burndown activity will particularly be enhanced on weeds growing under drought conditions or weeds that have been "topped" during the harvest operation.

Stratos plus Roundup® or Roundup RT®

Roundup® at 1 pint per treated acre may be tank mixed with Stratos for added postemergence control of grass or broadleaf weeds.

Stratos plus Atrazine

In areas such as Oklahoma and Texas where a higher ratio of atrazine to dicamba is desired, atrazine can be tank mixed with Stratos. *Refer to the Grain Sorghum General Application Rates Table of this label for the maximum amount of atrazine that can be applied.*

Stratos plus Landmaster BW® or Landmaster II®

Landmaster® at 27 to 54 ounces product per treated acre may be tank mixed with Stratos for added postemergence control of grass and broadleaf weeds.

Stratos plus Fallow Master

Fallowmaster® at 32 to 44 ounces product per treated acre may be tank mixed with Stratos for added postemergence control of grass and broadleaf weeds.

Stratos plus Gramoxone® or Cyclone®

Gramoxone® or Cyclone® may be tank mixed with Stratos for additional postemergence control of grass and broadleaf weeds. *Refer to Gramoxone or Cyclone label for recommended use rates.*

Stratos plus Sulfonylurea (Glean®, Ally® or others)

Apply as a tank mix with Stratos for additional preemergence or postemergence control of broadleaf weeds. *Refer to sulfonylurea (Glean®, Ally® or others) label for recommended use rates.*

Stratos plus Command®

Command® at 16 to 32 ounces product per acre may be tank mixed with Stratos for additional preemergence control of grass and broadleaf weeds.

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

PESTICIDE STORAGE: Store product in original container only. **DO NOT** contaminate water, other pesticides, fertilizer, food or feed in storage. Store in a well-ventilated area.

PESTICIDE DISPOSAL: Pesticide spray mixture or rinsate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. **CONTAINER DISPOSAL:**

(Nonrefillable container 5 gallons or less): DO NOT reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticiderelated materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Offer for recycling, if available. **Residue Removal:** Triple rinse or pressure 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 ¹/₄ full of 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. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

(Refillable containers up to 250 gallons or less): This is a refillable container. If the container is to be refilled, DO NOT rinse with any material, or introduce any pesticide other than this product. Reseal and return the container to the point of purchase or to a designated location named at the time of purchase of this product. DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE. If not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling. Disposal of this container must follow state and local regulations.

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC: 1-800-424-9300

Warranty and Disclaimer

Seller warrants that at the time of delivery the product in this container conforms to its chemical description contained hereon and is reasonably fit for its intended purpose under normal conditions of use. This is the only warranty made on this product. Seller expressly disclaims any implied warranties of merchantability or fitness for any particular purpose and, except as set forth above, any other express or implied warranties. Any damages arising from breach of warranty or negligence shall be limited to direct damages not exceeding the purchase price paid for this product by buyer and shall not include incidental or consequential damages such as, but not limited to, loss of profits or values. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of the seller. In no case shall Seller be liable for the consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the Buyer. Buyer acknowledges the use of its own independent skill and expertise in the selection and use of the product and does not rely on any oral or written statements or representations.

Registered Trademarks:

STRATOS[®] is a Registered Trademark of Gharda Chemicals International Inc.

Other Registered Trademarks [Optional]

Revised:	February 7, 2005 (Comply with Atrazine MOA)	[Optional]
Revised:	April 08, 2010 (Reregistration)	[Optional]
Revised:	September 01, 2017 (Reg. No. Transfer)	[Optional]
Revised:	Date tba (ID/Endangered Species)	

[Front Container Label remaining on container when Label Booklet is removed]

Restricted Use Pesticide

Due to Ground and Surface Water Concerns

For retail sale to and use only by certified applicators or persons under their direct supervision, and only for those uses covered by the certified applicator's certification.

DICAMBA	GROUP	7	HERBICIDE
ATRAZINE	GROUP	5	HERBICIDE

STRATOS[®]

Dicamba + Atrazine Agricultural Herbicide

For Weed Control in Corn, Grain Sorghum, and Fallow Systems.

Active Ingredients:	
Potassium salt of dicamba (3,6-dichloro-o-anisic acid)*	13.45%
Atrazine**	21.92%
Inert Ingredients:	<u>64.63%</u>
TOTAL	100.00%

- * This product contains 11.47% 3,6-dichloro-<u>o</u>-anisic acid (dicamba), which equals 1.1 pounds per gallon (132 g/L), or 0.14 pounds per pint.
- ** This product contains 21.92% 2-chloro-4-ethylamino-6-isopropyl/amino-s-triazine (atrazine), which equals 2.1 pounds per gallon (252 g/L), or 0.26 pounds per pint.

This labeling must be in the possession of the user at the time of the pesticide application.

EPA Reg. No. 93182-11 EPA Est. No. [tba]

SHAKE BEFORE USING

Keep Out of Reach of Children CAUTION

Refer to inside Label Booklet for additional Precautionary information including Directions for Use

AGRICULTURAL USE REQUIREMENTS

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

DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

Exception: If the product is soil injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

- PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:
- coveralls worn over short-sleeve shirt and short pants
- chemical-resistant footwear plus socks
- chemical-resistant Category E glove type (barrier laminate, nitrile rubber ≥ 14
- mils, neoprene rubber \geq 14 mils, or viton \geq 14 mils)
- chemical-resistant headgear for overhead exposure
- protective eyewear

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals

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

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are barrier laminate or nitrile rubber or neoprene rubber or viton.

All pilots and flaggers must wear: Long-sleeved shirt and long pants, shoes plus socks. In addition to the PPE above, ground boom applicators must also wear Category E chemical-resistant glove types made of (barrier laminate, nitrile rubber \geq 14 mils, neoprene rubber \geq 14 mils, or viton \geq 14 mils) material.

All mixers, loaders, other applicators, and other handlers must wear: Long-sleeved shirt and long pants, shoes plus socks, chemical-resistant Category E glove types (barrier laminate, nitrile rubber \geq 14 mils, neoprene rubber \geq 14 mils, or viton \geq 14 mils) and chemical-resistant apron when mixing, loading, or cleaning equipment or spills, and

a NIOSH-approved respirator with an organic vapor (OV) removing cartridge with any combination N, R, or P filter (NIOSH approval number prefix **TC-84A**); or an OV canister (NIOSH approval prefix TC-14G; or a powered air purifying respirator (PAPR) with HE filters (NIOSH approval prefix TC-23C.) It is recommended that you require the respirator wearer to be tested and trained in the use, maintenance, and limitations of the respirator. See engineering controls for additional requirements.

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

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

See engineering controls for additional requirements

USER SAFETY RECOMMENDATIONS Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Net Contents: ____ Gallons (____ Liters)

Manufactured for: Gharda Chemicals International Inc. 760 Newtown-Yardley Rd. Suite 110 Newtown, PA 18940 1-215-968-9474

Continued on Back Label . . .

[BACK CONTAINER LABEL

Continued from Front Label . . .

FIRST AID		
If inhaled:	 Remove person to fresh air. 	
	 If person is not breathing, call 911 or an ambulance, then give artificial 	
	respiration, preferably by mouth-to-mouth, if possible.	
	 Call a poison control center or doctor for further treatment advice. 	
If on Skin or	 Take off contaminated clothing. 	
clothing:	 Rinse skin immediately with plenty of water for 15-20 minutes. 	
Ŭ	 Call a poison control center or doctor for treatment advise. 	
If In eyes:	 Hold eye open and rinse slowly and gently with water for 15-20 minutes. 	
	 Remove contact lenses, if present, after the first 5 minutes, then continue 	
	rinsing eye.	
	 Call a poison control center or doctor for treatment advise. 	
	 Call poison control center or doctor immediately for treatment advice. 	
If swallowed:	 Have person sip a glass of water if able to swallow. 	
	 DO NOT induce vomiting unless told to do so by the poison control center or 	
	doctor.	
	 DO NOT give anything by mouth to an unconscious person. 	

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

For emergency medical treatment information call PROSAR at: 1 (866) 359-5660

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

ENGINEERING CONTROLS

Mixers and loaders supporting aerial applications **at a rate greater than 3 lbs ai/A** must use a closed system that meets the requirements for dermal protection listed in the Worker Protection Standard (WPS) for Agricultural Pesticides [40 CFR 170.240(d)(4) and must:

- wear the personal protective equipment required for mixers and loaders,
- ware protective eyewear if the system operates under pressure, and
- be provided and have immediately available for use in an emergency, such as a spill or equipment breakdown: chemical resistant footwear.

Pilots must use an enclosed cockpit in a manner that is consistent with the WPS for Agricultural Pesticides [40 CFR 170.240(d)(6)]. Pilots must wear the PPE required on this labeling for applicators, however, they need not wear chemical-resistant gloves when using an enclosed cockpit.

Flaggers supporting aerial applications must use an enclosed cab that meets the definition on the Worker Protection Standard for Agricultural Pesticides (40 CFR 170.240(d)(5)] for dermal protection.

When applicators use enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(5)], the handler PPE requirements may be reduced or modified as specified in the WPS.

ENVIRONMENTAL HAZARDS

Stratos Herbicide contains Atrazine. Atrazine can travel (seep or leach) through soil and can enter ground water, which may be used as drinking water. Users are advised not to apply Atrazine to sand and loamy sand soils where the water table (ground water) is close to the surface and where these soils are very permeable, i.e., well-drained. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water.

NON-TARGET ORGANISM ADVISORY STATEMENT: This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of nontarget organisms by following label directions intended to minimize spray drift.

GROUND SURFACE WATER ADVISORY:

Stratos contains the active ingredient Atrazine. Atrazine can leach through soil and has been found to result in contamination of water supplies by way of groundwater.

Growers are advised to avoid use of Stratos Herbicide in well-drained loamy sand to sand soils, particularly in areas having high groundwater tables. Consult with your state or county extension agent for alternative recommendations such as a combination with a non-triazine herbicide.

Check valves or anti-siphoning devices must be used on all mixing equipment to prevent back-siphoning into wells or bulk storage tanks. *See the Storage and Disposal section at the end of this booklet* regarding proper disposal of excess pesticide, spray mixtures and rinsates.

Refer to inside booklet for additional ENVIRONMENTAL RESTRICTIONS

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

PESTICIDE STORAGE: Store product in original container only. **DO NOT** contaminate water, other pesticides, fertilizer, food or feed in storage. Store in a well-ventilated area.

PESTICIDE DISPOSAL: Pesticide spray mixture or rinsate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. **CONTAINER DISPOSAL:**

(Nonrefillable container 5 gallons or less): DO NOT reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Offer for recycling, if available.

Residue Removal: Triple rinse or pressure rinse container (or equivalent)

promptly after emptying. <u>Triple rinse as follows:</u> 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. <u>Pressure rinse as follows:</u> Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. <u>Pressure rinse as follows:</u> Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. **(Refillable containers up to 250 gallons or less):** This is a refillable container. If the container is to be refilled, **DO NOT** rinse with any material or introduce any pesticide other than this product. Reseal and return the container to the point of

purchase or to a designated location named at the time of purchase of this product. **DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE**. If not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling. Disposal of this container must follow state and local regulations.

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC: 1-800-424-9300

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Date: tba

Ref. Code: tba [Optional]