

<b>SULFENTRAZONE</b>	<b>GROUP</b>	<b>14</b>	<b>HERBICIDE</b>
<b>CLORANSULAM</b>	<b>GROUP</b>	<b>2</b>	<b>HERBICIDE</b>

# TIGRIS<sup>TM</sup> SULFEN FIRST

**For Use Only by Individuals/Firms Certified as Licensed Pesticide Applicators**

<b>Active Ingredient:</b>	<b>(% by weight)</b>
Sulfentrazone* .....	62.1%
Cloransulam-methyl* .....	7.9%
<b>Other Ingredients</b> .....	<b>30.0%</b>
<b>Total</b> .....	<b>100.0%</b>

\* This product contains 0.7 pounds of active ingredient per pound of product (0.62 pounds a.i. of sulfentrazone and 0.08 pounds a.i. of cloransulam-methyl)

## KEEP OUT OF REACH OF CHILDREN CAUTION

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

**See additional Precautionary Statements and Directions for Use in booklet.**

<b>FIRST AID</b>	
<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>• Do not induce vomiting unless told to do so by the poison control center or doctor.</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>
<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> </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>HOT LINE NUMBER</b>	
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 the poison control center at <b>1-800-222-1222</b> .	

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

EPA Reg. No.: 92647-8



Manufactured for: **Tigris, LLC**  
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## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS & DOMESTIC ANIMALS

### CAUTION

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE):

Applicators and other handlers must wear:

- Protective eyewear
- Long-sleeved shirt and long pants,
- Waterproof gloves,
- Shoes plus socks

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### USER SAFETY RECOMMENDATIONS

##### Users should:

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

#### ENVIRONMENTAL HAZARDS:

This pesticide is toxic to marine/estuarine invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to terrestrial and aquatic plants in neighboring areas. Do not contaminate water when disposing of equipment wash waters or rinsate.

#### Groundwater Advisory:

This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Do not use on coarse soils classified as sand which have less than 1% organic matter.

#### Surface Water Advisory:

Sulfentrazone can contaminate surface water through spray drift. Under some conditions, sulfentrazone may also have a high potential for runoff into surface water (primarily via dissolution in runoff water), for several to many months post-application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-lying tile drainage systems that drain to surface waters.

#### PHYSICAL/CHEMICAL HAZARDS:

Do not use or store near heat or open flame.

#### RESISTANCE MANAGEMENT:

**Tigris Sulfen First** is a premixture of sulfentrazone (WSSA Group 14) and cloransulam-methyl (WSSA Group 2). Some weeds are known to develop resistance to herbicides that have been used repeatedly. While the development of resistance is well understood, it is not easily predicted. Therefore, herbicides should be used in conjunction with resistance management strategies in the area. Consult the local or State agricultural advisors for details. If weed resistance should develop in the area, this product used alone may not continue to provide sufficient levels of weed control. If the reduced levels of control cannot be attributed to improper application timing, unfavorable weather conditions or abnormally high weed pressure, a resistant strain may have developed.

To reduce the potential for weed resistance, use this product in a rotation program with other classes of chemistry and modes of action. Always apply this product at the specified rates and in accordance with the use directions. Do not use less than specified label rates alone or in tank mixtures. Do not use reduced rates of

the tank mix partner. For optimum performance, scout fields carefully and begin applications when weeds are smaller rather than larger. If resistance is suspected, contact the local or State agricultural advisors.

Suspected herbicide-resistant weeds may be identified by these indicators:

- 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.

To minimize the occurrence of resistant biotypes, observe the following general weed management practices:

- Scout application site before and after herbicide applications.
- Start with a clean application site, using either a burndown herbicide application or tillage.
- Control weeds early when they are relatively small.
- Add other herbicides (e.g. a selective and/or a residual herbicide) and cultural practices (e.g. tillage or crop rotation) where appropriate.
- Utilize the specified label rate for the most difficult to control weed in your field. Avoid tank mixtures with other herbicides that reduce this product's efficacy (through antagonism), or tank mixture directions that encourage application rates of this product below the label directions.
- Control weed escapes and prevent weeds from setting seeds.
- Clean equipment before moving from field to field to minimize the spread of weed seed or plant parts.
- Report any incidence of repeated non-performance of this product on a particular weed to local extension specialists, certified crop advisors, or your Tigris, LLC representative.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Failure to follow the Directions For use and Precautions on this label may result in plant injury or poor disease control.

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

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part

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

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls over long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

#### PRODUCT INFORMATION:

**Tigris Sulfen First** is for preemergence control of broadleaf and grass weeds in soybeans only.

The mode of action of **Tigris Sulfen First** involves uptake by weed roots and shoots. Preemergence and preplant incorporated applications of **Tigris Sulfen First** require rainfall or irrigation to activate the herbicide. The amount of rainfall or irrigation required for activation following application depends on existing soil moisture, organic matter content and soil texture. If adequate moisture (1/2" to 1") is not received within 7 to 10 days after the **Tigris Sulfen First** treatment, a shallow cultivation may be needed to obtain desired weed control. When sufficient moisture is received after dry conditions, **Tigris Sulfen First** will provide control of susceptible germinating weeds.



**Tigris Sulfen First** exhibits excellent crop safety. Poor growing conditions, such as excessive moisture, cool temperatures, and soil compaction or the presence of various pathogens may impact seedling vigor. Under these conditions, the active ingredients in **Tigris Sulfen First**, like other soil-applied herbicides, can contribute to crop response.

Observe all instructions, crop restrictions, mixing directions, application precautions, replanting directions, rotational crop guidelines and other label information of each product when tank mixing with **Tigris Sulfen First**.

#### IMPORTANT PRECAUTIONS

1. Back to back application of ALS or ALS containing herbicides can occasionally result in residual herbicide stacking and potential crop injury. Applicator and grower are responsible and should be aware of previous herbicide use and potential interaction it may have with **Tigris Sulfen First** application.
2. Ensure the seed furrow is closed and the seed covered on acres treated with **Tigris Sulfen First**.
3. Soybean stunting may occur if excessive rainfall occurs after application but before soybeans emerge. Injury is more prevalent under poor drainage or compacted conditions or when soil is saturated for long periods of time. Soybeans outgrow stunting once favorable growing conditions return.
4. Do not apply **Tigris Sulfen First** if there are visible signs of cracking due to soybean emergence, or serious crop injury such as but not limited to stand loss may result.
5. Seedling disease, nematodes, cold weather, deep planting (more than 2"), excessive moisture, high salt concentration, or drought may weaken soybean seedlings and increase the possibility of crop injury.

#### APPLICATION INFORMATION

##### DO NOT APPLY TO CROPS OTHER THAN SOYBEANS. APPLY WITH GROUND SPRAYERS ONLY

Use a standard low pressure herbicide boom sprayer equipped with suitable nozzles and screens. Apply uniformly using properly calibrated nozzles (10 to 40 psi) and screens and strainers no finer than 50 mesh. Use 10 to 40 gallons of spray solution per acre. Do not exceed 40 psi spray pressure unless required by the spray nozzle manufacturer.

Continuous agitation during application is required. Avoid swath overlaps. Shut off spray booms while turning, slowing or stopping, as over application may result. Do not allow **Tigris Sulfen First** spray mixtures to sit overnight as settling of product and difficulty of re-suspending may occur.

To avoid injury to sensitive crops, spray equipment used for **Tigris Sulfen First** applications must be drained and thoroughly cleaned with water plus ammonia before being used to apply other products. See Spray Clean-out Section.

Avoid all direct, and/or indirect spray contact with non-target plants. Do not apply near desirable vegetation. Allow adequate distance between target area and desirable plants to minimize exposure.

##### Runoff and Wind Erosion Precautions:

**Do not apply under conditions which favor runoff or wind erosion of soil containing Tigris Sulfen First to non-target areas. To prevent off-site movement due to runoff or wind erosion:**

- Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, allow the soil surface to be settled by rainfall or irrigation.
- Do not apply to impervious substrates such as paved or highly compacted surfaces or frozen or snow covered ground.
- Do not apply to soils when saturated with water.
- Do not use tail water from the first flood or furrow irrigation of treated fields to treat non-target crops unless at least 1/2 inch of rainfall has occurred between application and the first irrigation.

##### Spray Drift Reduction Advisory:

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

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

The following drift management requirements must be followed to avoid off-target movement from applications to agricultural field crops. Where States and local

governments have more stringent regulations, they must be observed.

##### Droplet Size Information:

Reduce drift potential by applying large droplets. The optimum drift management strategy is to apply the largest droplets that will provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift when applications are made improperly, or under unfavorable environmental conditions (See Wind, Temperature and Humidity and Temperature Inversions).

**VMD** – VMD is the expression of the droplet size of the spray cloud. The VMD value means that 50% of the droplets are larger than the expressed value and 50% of the droplets are smaller than the expressed value. Optimum spray clouds should be 450 microns with fewer than 10% of the droplets being 200 microns or smaller.

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

**Pressure** – Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

**Number of Nozzles** – Use the minimum number of nozzles that provide uniform coverage.

**Nozzle Type** – Use a nozzle type that is designed for the intended application. With most nozzle types narrower spray angles produce larger droplets. Consider using low drift nozzles.

**Application Height** – Making applications at the lowest height practical reduces exposure of spray droplets to evaporation and wind movement.

**Swath Adjustment** – Swath adjustment distance must increase with increasing drift potential (higher wind, smaller droplets, etc.)

**Wind** – Drift potentials are lowest between wind speeds of 3 to 10 miles per hour. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. Applications in wind conditions outside of this range could increase the risk of off-target effects and should be avoided. Note that local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

**Temperature and Humidity** – When making applications in conditions of low relative humidity set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

**Temperature Inversions** – Do not apply **Tigris Sulfen First** during temperature inversions because the drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the following morning. Their presence can be indicated by ground fog. However, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or a smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicate an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

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

#### Mixing Instructions and Loading Instructions

##### Proper Handling Instructions:

This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas.

Operations that involve mixing, loading rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet 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 from 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 capacity 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 specific minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Do not apply this product through any type of irrigation system. Do not use flood irrigation to apply or incorporate this product.

Product must be used in a manner which will prevent back siphoning in wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.

#### **Tigris Sulfen First Applied Alone**

Select the proper **Tigris Sulfen First** application rate from the following TIMING AND METHOD OF APPLICATION section of this label. Fill the spray tank with approximately one-half of the volume of water needed for the acreage being treated. With agitator operating, add the required amount of **Tigris Sulfen First** for acreage being treated by opening the bottle(s) and measuring directly into the spray tank. Allow the product to fully disperse. Complete the addition of spray water. Maintain agitation during filling, mixing and application. Apply the **Tigris Sulfen First** spray mixture immediately after mixing. Do not store mixture.

#### **Tigris Sulfen First Applied in Tank Mix Combination**

Select the proper **Tigris Sulfen First** application rate from TIMING AND METHOD OF APPLICATION section of label. Read and follow all applicable use directions, precautions and restrictions on the respective tank mix product labels. To ensure product compatibility, a jar test should be conducted before large volume mixing. Provided the jar test indicates the mixture is compatible, prepare the tank mixture as follows.

Fill the spray tank with approximately one-half of the volume of water needed for the acreage being treated. With agitator operating, add the required amount of **Tigris Sulfen First** for the acreage being treated by opening the bottle(s) and measuring directly into the spray tank. Allow the product to fully disperse. Next add the recommended amount(s) of the additional tank mix product(s) in the following order: first dry formulations (e.g., wettable powders, dry flowables), next liquid suspensions (e.g., flowables) and finally liquids (e.g., EC's). Allow time for complete mixing and dispersion after each addition, adding water as necessary. Complete the addition of spray water. Maintain agitation during filling, mixing and application. Use **Tigris Sulfen First** tank mixtures immediately after mixing. Do not store 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.

#### **Fertilizer Spray Mixtures**

Applications of **Tigris Sulfen First** alone, or with recommended tank mixtures, in conjunction with fertilizer solutions may be used unless use directions specifically state otherwise. Small quantities should be tested for compatibility by the following procedure before mixing in full spray tank quantities.

1. Put 1 pint of fertilizer solution in a quart jar.
2. Add the appropriate amount of herbicide based on the table below. If more than one product is to be used, add each separately using the following sequence: dry formulations (e.g., wettable powders, dry flowables) first, liquid suspensions (e.g., flowables) next and finally liquids (e.g., EC's).

<b>Herbicide Type</b>	<b>Herbicide Field Use Rate</b>	<b>Amount Herbicide Added Per Pint</b>
Wettable Powder or Dry Flowable	0.5 pound	0.75 teaspoon
	1.0 pound	1.50 teaspoons
	2.0 pounds	3.00 teaspoons
	3.0 pounds	4.50 teaspoons
Emulsified Concentrate	1.0 pint	0.5 teaspoon
Liquid Flowables	1.0 quart	1.0 teaspoon
	2.0 quarts	2.0 teaspoon
	3.0 quarts	3.0 teaspoon

\*Based on a spray volume of 25 gal. per acre. For lower or higher spray volumes, adjust fluid fertilizer quantity accordingly.

3. Close jar and shake well.
4. Watch mixture for several seconds, again after 5 minutes and again after 30 minutes. If herbicide/fertilizer combination remains mixed or can be remixed readily (i.e., does not permanently separate, foam, gel or become lumpy), the mixture is compatible and can be mixed in full volumes and sprayed. If the mixture is compatible, prepare spray by adding fertilizer solution to the tank first, then follow directions noted below:

#### **Tigris Sulfen First Applied Alone with Liquid Fertilizer**

In order to add **Tigris Sulfen First** to a liquid fertilizer carrier, **Tigris Sulfen First** must be premixed in a slurry of product and clear water.

Fill the spray tank one-half full with fertilizer solution. With agitator operating, add the **Tigris Sulfen First** slurry to the spray tank.

Use a minimum of one gallon of water for each container of **Tigris Sulfen First**. Stir until completely dissolved. Then add slurry to the spray tank through a 20-35 mesh screen. Rinse container used for pre-mixing and add rinsate to the spray tank. Complete filling the sprayer tank with fertilizer. Maintain agitation during filling, mixing and application. Use **Tigris Sulfen First** spray mixture immediately after mixing. Do not store mixture.

#### **Tigris Sulfen First Applied in Tank Mix Combinations with Fertilizer**

Fill the spray tank one-half full with fertilizer solution. With the agitator operating, add a slurry of **Tigris Sulfen First** as described in the preceding paragraph. Next dilute the individual tank mix partners with sufficient water to form a free flowing dispersion, then add to the spray tank of fertilizer. While maintaining agitation, add the other products using the following order: slurry of dry formulations (wetable powders, dry flowables) first, diluted liquid formulations (EC's, flowables) second. Complete filling the sprayer tank with fertilizer. Maintain agitation during filling, mixing and application. Use **Tigris Sulfen First** tank mixtures immediately after mixing. Do not store tank mixtures.



## SPRAY EQUIPMENT CLEAN-OUT

After spraying **Tigris Sulfen First** and before using sprayer equipment for any other applications, the sprayer must be thoroughly cleaned using the following procedure:

1. Drain sprayer tank, hoses, and spray boom and thoroughly rinse the inside of the sprayer tank with clean water to remove sediment and residues. Thoroughly flush sprayer hoses, boom and nozzles with clean water.
2. Fill the tank 1/2 full with clean water, and add appropriate detergent or ammonia (follow manufacturer's directions for use). Fill the tank to capacity and operate the sprayer for 15 minutes to flush hoses, boom, and nozzles.
3. Convenient and thorough cleaning of the sprayer can be achieved if the cleaning solution is left in the spray tank, hoses, spray booms and spray nozzles overnight or during storage.
4. Before using the sprayer, drain the sprayer system. Rinse the tank with clean water and flush through the hoses, boom, and nozzles. Remove and clean spray tips and screens separately with the detergent or ammonia solution.
5. Properly dispose of all cleaning solution and rinsate in accordance with Federal, State and local regulations and guidelines.

Do not drain or flush equipment on or near desirable trees or plants. Do not contaminate any body of water including irrigation water that may be used on other crops. Should small quantities of **Tigris Sulfen First** remain in inadequately cleaned mixing, loading and/or spray equipment, they may be released during subsequent applications potentially causing effects to certain crops and other vegetation. Tigris, LLC accepts no liability for any effects due to inadequately cleaned equipment.

## ROTATIONAL CROP GUIDELINES

Shown below are the minimum intervals in months from the time of **Tigris Sulfen First** application until **Tigris Sulfen First** treated soil may be replanted with the crops listed. Cover crops for soil health and erosion control can be planted at any time after an application of **Tigris Sulfen First**, but do not use for food or feed. Residual activity of **Tigris Sulfen First** may result in injury to some cover crop species if planted to soon following application. Consult your local University extension service for cover crop sensitivity to **Tigris Sulfen First**. When **Tigris Sulfen First** is tank mixed with other herbicide(s), refer to all the labels for re-cropping instructions, following the intervals that are the most restrictive. For crops not listed the interval is 30 months and a successful field bioassay.

Crop	Interval (months)
Alfalfa	12
Barley	12
Canola	24
Corn, Field*	18 or 10
Corn, Pop*	18 or 10
Corn, Seed*	18 or 10
Corn, Sweet	18 or 10
Cotton	18 or 12†
Dry shelled beans and peas	9
Lima beans	12
Oats	12
Peanuts	12

Crop	Interval (months)
Potatoes	18
Rice	10
Rye	12
Snap beans	12
Sorghum	12
Soybeans	Anytime
Succulent peas	9
Sugar beets**	30
Sunflower**	30
Tobacco***	30
Wheat	4

\*Corn (including field corn, popcorn and seed corn): Observe an 18-month rotational interval if 6.45 – 8.0 oz. of **Tigris Sulfen First** is applied to soils of 1.5% organic matter or less, and pH is above 7.

**Hybrid Seed Production:** Corn inbred lines grown for hybrid seed production may be injured the growing season following an application of **Tigris Sulfen First**. Inbred lines should be thoroughly tested for crop tolerance before rotating to production scale acreages. Tigris, LLC will not accept responsibility for any crop injury on field corn grown for seed following an application of **Tigris Sulfen First**.

\*\* These crops require a 30-month rotational interval and a successful field bioassay.

\*\*\* Transplanted tobacco may be planted 10 months after application of a maximum application rate of 3.0 ounces per acre of **Tigris Sulfen First**. Tobacco in seedbed nurseries may be replanted 18 months after applications of 3.0 ounces per acre of **Tigris Sulfen First** and following a successful field bioassay. A rotational interval of 30 months and a successful field bioassay is required for all applications of **Tigris Sulfen First** greater than 3.0 ounces per acre.

† Cotton may be planted after 12 months where **Tigris Sulfen First** was applied at rates 5 oz/acre or less and meets the following conditions:

- Medium and fine soils
- Ph <7.2
- Rainfall or irrigation must exceed 15" after application of **Tigris Sulfen First**

## REPLANTING INSTRUCTIONS

If the initial planting of soybeans fails to produce a uniform stand, soybeans may be replanted in fields treated with **Tigris Sulfen First** alone. Do not retreat fields with a second application of **Tigris Sulfen First**. When tank mixing with a labeled product, refer to the replant instructions for that product. Do not replant treated fields with any crop at intervals that are inconsistent with the ROTATIONAL CROP GUIDELINES on the **Tigris Sulfen First** label. Where a tank mix is used, refer to the product's labels for any additional replant instructions.



**SOYBEANS (Conventional and GMO) Timing and Method Application:**

**Tigris Sulfen First** may be used alone or in tank mixture combinations for the control of the weeds listed in conventional or GMO soybean varieties.

Standard Rate Table 1:

Soil Organic Matter*	Tigris Sulfen First (Dry Ounces per Acre)**	Product Use Rates (Pound Active Ingredient Per Acre)	
		Sulfentrazone	Cloransulam-methyl
3% or less	6.45	0.25	0.032
Greater than 3%	8.00	0.31	0.040

\*Do not apply **Tigris Sulfen First** to soils classified as sand with less than 1% organic matter.

\*\*Maximum application rates: See Preplant Surface and Preemergence Application below for specific recommendations.

**Preplant Incorporated Application:**

Apply **Tigris Sulfen First** alone or in tank mix combination with other herbicides registered for preplant incorporated application to soybeans. Incorporate the herbicide(s) into the top 1 to 3 inches of the final seedbed using equipment that provides thorough soil mixing. When **Tigris Sulfen First** is applied in tank mix combination with other herbicide(s), follow the incorporation directions for the tank mix partner(s). Follow applicable use instructions, including application rates, precautions and restrictions of each product used in the tank mixture.

**Preplant Surface Application**

Apply **Tigris Sulfen First** alone or in tank mix combination with other herbicides registered for preplant soil surface application to soybeans. If applied in tank mix combination, follow use instructions, including application rates (note: apply 1/2 of the maximum application rate for suppression of weeds in Roundup Ready soybeans, maintaining control with sequential application(s) of registered postemergence herbicides), precautions and restrictions of each product used in the tank mixture.

**Preemergence Application**

Apply at planting time or within 3 days after planting. **Tigris Sulfen First** may be applied alone or in tank mix combination with other herbicides registered for preemergence application to soybeans. When applied in tank mix combination, follow applicable use instructions, including application rates (note: apply 1/2 of the maximum application rate for suppression of weeds in Roundup Ready soybeans, maintaining control with sequential application(s) of registered postemergence herbicides). Observe the precautions and restrictions of each product used in the tank mixture. Apply before planting, at planting time or prior to seed germination. Properly closed seed furrows are necessary when applying at planting time of before seed germination. Do not apply later than 3 days after planting (or after seed germination), as crop injury may result.

**Weeds Controlled:**

When used as directed above, **Tigris Sulfen First** will provide control or suppression of the following broadleaf weeds and grasses.

Common Name	Scientific Name	Common Name	Scientific Name
<b>Broadleaves</b>			
Amaranth, Palmer	<i>Amaranthus, Palmer</i>	Morningglory, smallflower	<i>Jacquemontia tamnifolia</i>
Amaranth, spiny	<i>Amaranthus, spinosus</i>	Morningglory, tall	<i>Ipomea, purpurea</i>
Anoda, spurred	<i>Anoda cristata</i>	Mustard, wild	<i>Brassica kaber</i>
Beggarweed, Florida	<i>Desmodium tortuosum</i>	Nightshade, Eastern black	<i>Solanum americanum</i>
Carpetweed	<i>Mollugo verticillata</i>	Nightshade, hairy	<i>Solanum sarrachoides</i>
Cocklebur, common	<i>Xanthium Pensylvanicum</i>	Nightshade, silverleaf	<i>Solanum elaeagnifolicum</i>
Copperleaf, Hophornbeam	<i>Acalypha ostryeafolia</i>	Pigweed, redroot	<i>Amaranthus retroflexus</i>
Croton, tropic	<i>Croton glandulosus</i>	Pigweed, smooth	<i>Amaranthus hybridus</i>
Daisy, American	<i>Eclipta alba</i>	Pigweed, tumble	<i>Amaranthus albus</i>
Dayflower, common	<i>Commelina communis</i>	Poorjoe	<i>Diodia teres</i>
Galinsoga, hairy	<i>Galinsoga ciliata</i>	Purslane, common	<i>Portulaca oleracea</i>
Groundcherry, clammy	<i>Physalis heterophylla</i>	Pusley, Florida	<i>Richardia scabra</i>
Groundcherry, cutleaf	<i>Physalis angulata</i>	Ragweed, common **	<i>Ambrosia artemisiifolia</i>
Horseweed (Marestail)**	<i>Hippuris vulgaris</i>	Ragweed, giant **	<i>Ambrosia trifida</i>
Jimsonweed	<i>Datura stramonium</i>	Senna, coffee	<i>Cassia occidentalis</i>
Kochia	<i>Kochia scoparia</i>	Teaweed	<i>Sida, prickly</i>
Ladysthumb	<i>Polygonum persicaria</i>	Smartweed, PA	<i>Polygonum pensylvanicum</i>
Lambsquarters, common	<i>Chenopodium album</i>	Smellmelon	<i>Cucumis melo</i>
Mallow, Venice	<i>Hibiscus trionum</i>	Spurge, spotted	<i>Euphorbia maculata</i>
Mexicanweed	<i>Caperonia castanaefolia</i>	Starbur, bristly	<i>Acanthospermum hispidum</i>
Morningglory, entireleaf	<i>Ipomea hederacea integrusc</i>	Sunflower, common	<i>Helianthus annuus</i>
Morningglory, ivyleaf	<i>Ipomea hederacea hederacea</i>	Thistle, Russian	<i>Salsola kali</i>
Morningglory, palmleaf	<i>Ipomea Wrightii</i>	Velvetleaf	<i>Abutilon theophrasti</i>



Common Name	Scientific Name	Common Name	Scientific Name
Morningglory, pitted*	<i>Ipomea lacunosa</i>	Waterhemp, common	<i>Amaranthus rudis</i>
Morningglory, purple	<i>Ipomea turbinata</i>	Waterhemp, tall	<i>Amaranthus tuberculatos</i>
Morningglory, red	<i>Ipomea coccinea</i>		
<b>Grasses</b>			
Barnyardgrass*	<i>Echinochloa crus-galli</i>	Crowfootgrass*	<i>Dactyloctenium aegyptium</i>
Broadleaf signalgrass	<i>Brachiaria platyphylla</i>	Foxtail, giant*	<i>Setaria faberi</i>
Crabgrass, large	<i>Digitaria sanguinalis</i>	Foxtail, Green*	<i>Setaria viridis</i>
Crabgrass, smooth	<i>Digitaria ischaemum</i>	Foxtail, yellow*	<i>Setaria lutescens</i>
Crabgrass, southern*	<i>Digitaria ciliaris</i>	Goosegrass	<i>Eleusine indica</i>

\* Provides suppression or partial control only

\*\* Will not control ALS resistant biotypes of these weed species

#### Limited Residual Rates for Planned Sequential Application Program in Soybeans

Use rates in Table 2 are to be used in conjunction with an effective planned POST herbicide program; **Tigris Sulfen First** at these reduced rates will provide early season control or suppression to reduce early season weed competition. If resistance with the POST herbicide is documented in your area, use rates in Table 1.

Apply before planting, at planting time or prior to seed germination. Properly closed seed furrows are necessary when applying at planting time of before seed germination. Recommended postemergence treatments may include any product or combination of products labeled for use.

#### Limited Residual Rate Table for Planned Sequential Application Program in Soybeans

Table 2:

Soil Organic Matter*	Tigris Sulfen First (Dry Ounces per Acre)	Product Use Rates (Pound Active Ingredient Per Acre)	
		Sulfentrazone	Cloransulam-methyl
3% or less	3.00 – 5.00	0.116 – 0.193	0.015 – 0.025
Greater than 3%	4.00 – 6.00	0.155 – 0.233	0.020 – 0.030

\*Do not apply **Tigris Sulfen First** to soils classified as sand with less than 1% organic

#### Preplant Burndown Application

**Tigris Sulfen First**, used at 6.45 – 8.0 oz./acre as in Full Rate Table 1 above, aids in the burndown of weeds listed below, when applied as follows. **Tigris Sulfen First** can provide for increased burndown activity on emerged weeds in no-till applications, but is not intended to replace part or all of an appropriate preplant burndown program. For control of the weeds in the Weeds Controlled table in no-till / minimum till fields, **Tigris Sulfen First** must be tank-mixed or used in combination with a full burndown program. This may include 2,4-D alone or in combination with Aim1, dicamba, glyphosate, glufosinate, paraquat, or other appropriate burndown herbicides in tank-mixes at their appropriate rate for the size and species of weeds present. Reduced rates of **Tigris Sulfen First** and/or the corresponding burndown partner herbicides can result in weed escapes and unsatisfactory performance.

Apply a minimum of ten gallons per acre finished spray volume. Thorough coverage is essential. Use a non-ionic surfactant (NIS) having at least 80% active ingredient strength at 0.125-0.25% v/v (1-2 pints per 100 gallons of spray solution) plus ammonium sulfate (AMS) at 2.5% v/v. Crop oil concentrate (COC) and Methylated Seed Oil (MSO) at 1.2% v/v plus ammonium sulfate may be used. Burndown results may be slowed or reduced when the growth of the weeds is affected by unusual environmental factors just prior to or after application such as especially cool or widely fluctuating day and night air temperatures, drought, heat stress, or waterlogged soils.

#### Weeds Controlled

When used as directed for burndown, **Tigris Sulfen First** will aid in the control or suppression of the following broadleaf weeds up to 3" tall.

Common Name	Scientific Name	Common Name	Scientific Name
<b>Broadleaves</b>			
Cocklebur, common	<i>Xanthium Pensylvanicum</i>	Morningglory, red	<i>Ipomea coccinea</i>
Horseweed (Marestail)**	<i>Hippuris vulgaris</i>	Morningglory, smallflower	<i>Jacquemontia tamnifolia</i>
Jimsonweed	<i>Datura stramonium</i>	Morningglory, tall	<i>Ipomea purpurea</i>
Mallow, Venice	<i>Hibiscus trionum</i>	Ragweed, common**	<i>Ambrosia artemisiifolia</i>
Morningglory, entireleaf	<i>Ipomea hederacea tinegrisc</i>	Ragweed, giant**	<i>Ambrosia trifida</i>
Morningglory, ivyleaf	<i>Ipomea hederacea hederacea</i>	Sicklepod	<i>Cassia obtusifolia</i>
Morningglory, palmleaf	<i>Ipomea Wrightii</i>	Smartweed, PA	<i>Polygonum pensylvanicum</i>
Morningglory, pitted*	<i>Ipomea lacunosa</i>	Sunflower, common	<i>Helianthus annuus</i>
Morningglory, purple	<i>Ipomea turbinata</i>	Velvetleaf*	<i>Abutilon theophrasti</i>

\* For Velvetleaf control, use 28% nitrogen (UAN) or AMS with NIS or COC.

\*\* **Tigris Sulfen First** will not control ALS resistant biotypes of these weed species

#### Precautions

Properly closed seed furrows are necessary when applying at planting time of before seed germination. Maintain spray tank agitation until the spray mixture is applied.

#### Restrictions

Do not apply this product by air or through any type of irrigation system. Do not make more than one soil application per crop year.

- Do not apply more than 8.0 ounces of **Tigris Sulfen First** per acre per season. Do not apply more than
- 0.055 lb. active ingredient (a.i.) per acre of cloransulam-methyl in a single growing season.



- Do not feed treated soybean forage or soybean hay to livestock.
- Pre-harvest Interval (PHI): Do not harvest soybeans for 65 days after application of **Tigris Sulfen First**.
- Do not apply **Tigris Sulfen First** to soils classified as sand containing less than 1% organic matter.
- Do not drain or flush equipment on or near desirable trees or plants. Do not contaminate any body of water including irrigation water that may be used on other crops.
- When tank mixing, follow the most restrictive use rates and precautions of the mixing partners.

#### STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store product in original container only, away from other pesticides, fertilizer, food or feed.

**In Case of Spill:** Avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call CHEMTREC (Transportation and spills): (800) 424-9300.

**To Confine Spill:** Dike surrounding area, sweep up spillage. Dispose of in accordance with information given under Pesticide Disposal. Wash spill area with water, absorb with sand, cat litter or commercial clay, sweep up and dispose of in an approved manner. Place damaged package in a holding container. Identify contents per required hazardous waste labeling regulations.

**Pesticide Disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional office for guidance.

#### CONTAINER HANDLING

**Nonrefillable container** - Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: (For containers greater than 5 gallons) Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 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. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. (For containers 5 gallons or less) 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 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. Triple rinse (or equivalent). Then offer for recycling if available, or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### LIMITATION OF WARRANTY AND LIABILITY

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

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

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