



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

January 20, 2023

Mary Beth Endres
Regulatory Manager
LIBERTY CROP PROTECTION, LLC.
1880 FALL RIVER DRIVE, SUITE 100
LOVELAND, CO 80538

Subject: Registration Review Label Amendments Incorporating Mitigation Measures from the Interim Decisions for S-Metolachlor and the National Marine Fisheries Services' (NMFS) Biological Opinion on the Effects of S-Metolachlor on Pacific Salmonids
Product Name: LIBERTY X-SULFENT-SMOC
EPA Registration Number: 89168-89
Application Dates: 8/26/21 and 4/20/21
Decision Numbers: 588747,588748

Dear Mary Beth Endres:

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 S-Metolachlor Interim Decision. The Agency has concluded that your submission is acceptable.

This letter also addresses the label mitigation resulting from the NMFS' Biological Opinion on the effects of S-Metolachlor on Pacific salmonids. The Agency has concluded that your submission is also 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 labeling for 12 months from the date of this letter. After 12 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 DeMariah Koger at koger.demariah@epa.gov.

Sincerely,



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

Enclosure

SULFENTRAZONE	GROUP	14	HERBICIDE
S-METOLACHLOR	GROUP	15	HERBICIDE

LIBERTY X-SULFENT-SMOC

HERBICIDE

FOR USE IN DRY SHELLED BEANS AND PEAS, HORSERADISH, SOYBEANS AND SUNFLOWERS

ACTIVE INGREDIENTS:	% BY WT.
Sulfentrazone	5.67%
S-metolachlor	51.20%
OTHER INGREDIENTS*:	43.13%
TOTAL:	100.00%

Contains a total of 5.22 lb/gal which include 0.52 lb ai sulfentrazone and 4.7 lb ai s-metolachlor per gallon.

*Contains petroleum distillates.

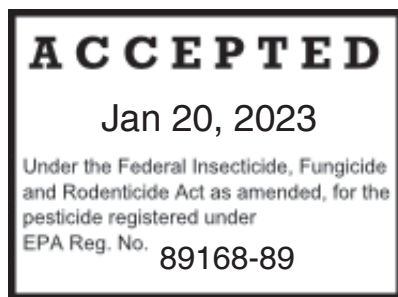
KEEP OUT OF REACH OF CHILDREN
CAUTION / PRECAUCIÓN

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).

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300

SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS.

Not for Sale, Sale into, Distribution and/or Use in Nassau and Suffolk Counties of New York State.



EPA Reg. No.: 89168-89

EPA Est. No.: _____

NET CONTENTS: ____ Gal (____ L)

Manufactured for:
 LIBERTY CROP PROTECTION, LLC
 1880 Fall River Drive, Suite 100
 Loveland, CO 80538

120822

FIRST AID	
IF SWALLOWED:	<ul style="list-style-type: none"> • Immediately call a poison control center or doctor. • DO NOT induce vomiting unless told to do so by a poison control center or doctor. • DO NOT give any liquid to the person. • DO NOT give anything by mouth to an unconscious person.
IF IN EYES:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
IF INHALED:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
HOTLINE NUMBER	
<p>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 National Pesticides Information Center (NPIC) at 1-800-858-7378 or your poison control center at 1-800-222-1222. For Chemical Spill, Leak, Fire or Exposure, call CHEMTREC 800-424-9300.</p>	
NOTE TO PHYSICIAN	
<p>May pose an aspiration pneumonia hazard. Contains petroleum distillate.</p>	

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION**

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

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Coveralls over short-sleeved shirt and short pants,
- Chemical-resistant gloves made of barrier laminate, nitrile rubber ≥14 mils, butyl rubber ≥14 mils, or Viton ≥14 mils
- Chemical-resistant footwear plus socks
- Appropriate protective eyewear
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing, or loading

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.

Engineering Controls

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240)(d)(4-6), may be reduced or modified as specified in the WPS. Mixers and loaders supporting aerial applications are required to use closed systems. The closed system must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)]. When using the closed system, the mixers' and loaders' PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

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

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and 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 washwaters or rinsate.

Groundwater Advisory

Metolachlor/S-metolachlor and Sulfentrazone are known to leach through soil into groundwater under certain conditions as a result of label use. This product may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

DO NOT use on coarse soils classified as sand, which have less than 1% organic matter.

Surface Water Advisory

S-metolachlor and Sulfentrazone may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow groundwater. This product is classified as having high potential for reaching surface water via runoff for several weeks or months after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of metolachlor/S-metolachlor from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

Non-Target Organism Advisory

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

Reporting Ecological Incidents:

To report ecological incidents, including mortality, injury, or harm to plants and animals, call 844-425-8488.

MIXING AND LOADING INSTRUCTIONS

Care must be taken when using this product to prevent back-siphoning into wells, spills, or improper disposal of excess pesticide, spray mixtures, or rinsates. Check-valves or anti-siphoning devices must be used on all mixing and/or irrigation equipment.

This product may not be mixed or loaded within 50 feet of perennial or intermittent streams and rivers, natural or impounded lakes, and reservoirs. This product may not be mixed/loaded or used 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 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 rain water 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-specified 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.

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

PHYSICAL AND CHEMICAL HAZARDS

DO NOT use or store near heat or open flame.

DIRECTIONS FOR USE

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

Endangered Species Protection Requirements:

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 and certain threatened 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.

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. These requirements 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-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 over short-sleeve shirt and short pants, chemical-resistant gloves made of barrier laminate, nitrile rubber ≥ 14 mils, butyl rubber ≥ 14 mils, or Viton ≥ 14 mils, and chemical-resistant footwear plus socks.

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WEED RESISTANCE MANAGEMENT

For resistance management, this product contains both a Group 14 (sulfentrazone) and Group 15 (S-metolachlor) herbicide. Any weed population may contain plants naturally resistant to Group 14 and/or Group 15 herbicides. The resistant individual may dominate the weed population if these herbicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

Weed Management

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

- Rotate the use of this product or other Group 14 and Group 15 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in the field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout before and after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) 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.
- For further information or to report suspected resistance, contact LIBERTY CROP PROTECTION, LLC at 844-425-8488.

Management of Resistant Biotypes

Since the occurrence of resistant weeds cannot be determined until after product use and scientific confirmation, manufacturer is not responsible for any losses that may result from the failure of this product to control resistant weed biotypes.

The following good agronomic practices are recommended to reduce the spread of resistant biotypes:

- If a naturally occurring resistant biotype is present in your application site, this product should be tank-mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control.
- Cultural and mechanical control practices (e.g. crop rotation or tillage) may also be used as appropriate.
- Scout treated application site after herbicide applications and control escaping weeds including resistant biotypes before they set seed.
- Thoroughly clean equipment before leaving fields known to contain resistant biotypes.
- Contact your local sales representative, crop advisor, or extension agent to find out if suspected resistant weeds to these Mode of Actions have been found in your region. **DO NOT** assume that each listed weed is being controlled by multiple mechanisms of action. Co-formulated active ingredients are intended to broaden the spectrum of weeds that are controlled. Some weeds may be controlled by only one of the active ingredients in this product.

Integrated Pest (Weed) Management

This product may be integrated into an overall weed pest management strategy whenever the use of an herbicide is required. Practices known to reduce weed development (tillage, crop competition) and herbicide use (weed scouting, proper application timing, banding) should be followed wherever possible. Consult local agricultural and weed authorities for additional IPM strategies established for your area.

PRODUCT INFORMATION

LIBERTY X-SULFENT-SMOC is a soil-applied herbicide for the control of susceptible broadleaf, grass and sedge weeds.

If adequate moisture (1/2 to 1 inch) from rainfall or irrigation is not received within 7 to 10 days after the LIBERTY X-SULFENT-SMOC treatment, a shallow incorporation (less than 2 inches), may be needed to obtain desired weed control.

When activating moisture is not received a planned post-emergence application of a labeled herbicide will be needed for optimum weed control. If an activating rainfall (1/2 to 1 inch) is not received LIBERTY X-SULFENT-SMOC will provide a reduced level of control of susceptible germinating weeds.

LIBERTY X-SULFENT-SMOC can be mixed with water, liquid fertilizer, or mixtures of water and liquid fertilizer and applied as a preplant or preemergence treatment to labeled crops. 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.

Under normal growing conditions, LIBERTY X-SULFENT-SMOC exhibits excellent crop safety. Soil applications of this product must be made before crop seed germination to prevent injury to the emerging crop seedlings. LIBERTY X-SULFENT-SMOC applied after crop emergence will cause severe injury to the crop. Poor growing conditions, such as excessive soil moisture, cool temperatures, and soil compaction or the presence of various pathogens may impact seedling vigor. Under these conditions, the active ingredients in this product can contribute to crop response. Refer to the specific directions of use for a particular crop or use pattern as set forth below for additional information.

Important Precautions

1. Ensure the seed furrow is closed and the seed covered on acres treated with this product.
2. 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.
3. Seedling disease, nematodes, cold weather, deep planting (more than 2 inches), excessive moisture, high salt concentration, or drought may weaken soybean seedlings and increase the possibility of crop injury.

Restrictions

- **DO NOT** apply other products containing sulfentrazone or s-metolachlor to the crop unless specified in the individual crop section.
- **DO NOT** use in nurseries, turf or landscape plantings.
- **DO NOT** apply if there are visible signs of cracking due to soybean emergence, or serious crop injury may result, such as but not limited to stand loss.
- When tank mixing, follow the most restrictive use rates and precautions of the mixing partners.

Mechanism of Action

Following the application of LIBERTY X-SULFENT-SMOC to soil, germinating seeds and seedlings take up this product from the soil solution. The amount of LIBERTY X-SULFENT-SMOC in soil solution available for weed uptake is determined primarily by soil type, soil organic matter and soil pH. Similar to other herbicides, this product adsorbs to the clay and organic matter (OM) fractions of soils; effectively limiting the amount of active ingredient immediately available to control weeds.

Influence of soil type, organic matter and pH on LIBERTY X-SULFENT-SMOC use rates and crop response

Coarse textured and high pH >7.2 soils (see Table 1) will exhibit increased weed control and crop response with LIBERTY X-SULFENT-SMOC. It is important to know the soil type and soil pH levels of the field (or areas within a field) before application to determine the proper rate of this product for the crop. Soil organic matter content and soil pH can vary widely and independently of soil type and requires an accurate analysis of representative soil samples or grids of soil samples within a specific field to determine its content.

It is important to note that irrigation with highly alkaline water (high pH) following a LIBERTY X-SULFENT-SMOC soil application can also significantly increase the amount of this product available in the soil solution. Irrigation with water having a pH greater than 7.2 could result in adverse crop response. This response will ultimately depend on initial LIBERTY X-SULFENT-SMOC application rate, timing, amount and pH of irrigation water and sensitivity of the crop and its growth stage when irrigated. The risk of adverse crop response will lessen with the advance in growth stage among most crops.

Table 1: SOIL TEXTURE CLASSIFICATION CHART

COARSE	MEDIUM	FINE
Sand	Sandy clay loam	Silty clay loam
Loamy sand	Sandy clay	Silty clay
Sandy loam	Loam	Clay loam
	Silt loam	Clay
	Silt	

APPLICATION INFORMATION

Ground and Aerial Application

Utilize a sprayer equipped with the appropriate nozzles providing optimum spray distribution and coverage at the appropriate operating pressures. Utilize nozzles that produce minimal amounts of fine spray droplets to avoid spray drift. Calibrate the sprayer properly to deliver the appropriate volume of herbicide solution. Be aware that overlaps and slower ground speeds while starting, stopping or turning while spraying may result in excessive application and subsequent crop response.

Restrictions

- **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.
- **DO NOT** apply under conditions which favor runoff or wind erosion of soil containing this product to non-target areas. To prevent off-site movement due to runoff or wind erosion:
 1. **DO NOT** treat powdery dry or light sand soils when conditions are favorable for wind erosion. Under these conditions, the soil surface must first be settled by rainfall or irrigation.
 2. **DO NOT** apply to impervious substrates, such as paved or highly compacted surfaces.
 3. **DO NOT** use tailwater 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.

Restrictions for Ground Application

- Ground applicators must use a minimum finished spray volume of 10 gallons per acre.
- When tank mixed with a contact burndown herbicide, ground applicators must use a minimum spray volume of 15 gallons per acre.
- For boom spraying, the maximum release height is 30 inches from the soil for ground applications.

Restrictions for Aerial Application

- Aerial application is allowed only when environmental conditions prohibit ground application. Aerial application will be allowed when the field is too wet to safely apply pesticides using ground equipment.
- For aerial applications, the maximum release height must be 10 feet from the top of the crop canopy, unless a greater application height is required for pilot safety.
- When this product is allowed to be applied by air, applicator must use a minimum finished spray volume of 5 gallons per acre.

Chemigation Application

Apply this product in 0.25 to 1 inch of water. Use the lower water volume on coarse textured soil and higher volume on fine textured soils. Applying >1 inch of irrigation water may result in reduced weed control by moving the product below the weed germination zone in the soil. Apply immediately after planting unless specified differently in the individual crop section. This product may be applied through sprinkler irrigation systems including center pivot, lateral move, end tow, solid set, or hand move irrigation systems. Crop injury, lack of effectiveness or illegal residues on or in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must also contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

This product should be metered into the irrigation system continuously for the duration of the water application. This product should be diluted in sufficient volume to insure accurate application over the area to be treated. Use the appropriate amount of water to carry the product to the soil surface. Continuous agitation is required to maintain product suspension in the solution tank. A jar test should be conducted to ensure that phase separation would not occur during dilution and application. Failure to achieve a uniform dilution throughout the time of application may result in undesirable residues or less than desirable weed control. Flush the lines at the completion of the application and then turn the water off promptly.

When using water from public water systems; **DO NOT** apply this product through any irrigation system physically connected to a public water system. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days of the year. This product may be applied through irrigation systems, which may be supplied by a public water system only if water from the water system is discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and to top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. Before beginning chemigation, always make sure that the air gap exists and that there is no blockage of the overflow of the reservoir tank.

It is important to note that irrigation with highly alkaline water (high pH) following a soil application of this product may significantly increase the amount of sulfentrazone available in soil solution. Irrigation with water having a pH greater than 7.2 could result in adverse crop response.

Restrictions

- **DO NOT** apply if there are visible signs of cracking due to soybean emergence, or serious crop injury may result, such as but not limited to stand loss.
- **DO NOT** apply this product through any other type of irrigation system.
- **DO NOT** connect any irrigation system (including greenhouse systems) used for pesticide application to a public water system.

Application with Dry Fertilizers

LIBERTY X-SULFENT-SMOC may be applied impregnated on dry fertilizers. When applied as directed with adequate soil coverage, LIBERTY X-SULFENT-SMOC dry bulk fertilizer mixtures will provide satisfactory weed control. Follow all label directions for this product regarding product use rates per acre, registered crops, incorporation, special instructions and precautions. Apply LIBERTY X-SULFENT-SMOC/dry fertilizer mixtures with ground equipment only. All individual state regulations relating to dry bulk fertilizer blending, registration, labeling, and application are the responsibility of the individual and/or company preparing, storing, transporting, selling or applying the LIBERTY X-SULFENT-SMOC/dry fertilizer mixture.

Impregnation Directions

To impregnate LIBERTY X-SULFENT-SMOC on dry bulk fertilizer, use a closed rotary-drum mixer or other commonly used dry bulk fertilizer blender equipped with suitable spray equipment.

Prepare a slurry of LIBERTY X-SULFENT-SMOC in a clean container using clear water. Slowly add the LIBERTY X-SULFENT-SMOC/water slurry to the impregnation spray tank and finish filling as needed with clear water. Spray nozzles must be placed to provide uniform coverage of LIBERTY X-SULFENT-SMOC onto the fertilizer during mixing.

Refer to the SPRAYER EQUIPMENT CLEAN-OUT section for directions for cleaning impregnation equipment, transport equipment, loading equipment and application equipment.

Apply the LIBERTY X-SULFENT-SMOC dry bulk fertilizer with an accurately calibrated dry fertilizer spreader. The LIBERTY X-SULFENT-SMOC dry bulk fertilizer mixture must be spread uniformly on the soil surface. Uneven spreading leaving untreated areas can cause poor weed control or overlapping areas with potential increased LIBERTY X-SULFENT-SMOC use rates could result in possible crop response.

A minimum of 200 pounds of dry bulk fertilizer impregnated with the listed amount of LIBERTY X-SULFENT-SMOC must be applied per acre to achieve adequate soil coverage for satisfactory weed control.

Refer to the appropriate crop section of the LIBERTY X-SULFENT-SMOC label to determine the rate of LIBERTY X-SULFENT-SMOC to be applied per acre. Use the following table to determine the amount of LIBERTY X-SULFENT-SMOC to be impregnated on a ton (2000 pounds) of dry bulk fertilizer based on the rate of fertilizer that will be applied per acre.

For those rates not listed in Table 2, calculate the amount of LIBERTY SULFENT/R-MET to be impregnated on a ton of dry bulk fertilizer using the following formula:

$$\frac{2000}{\text{Pounds dry fertilizer per acre}} \times \text{LIBERTY X-SULFENT-SMOC use rate in fluid ounces per acre} = \text{Fluid ounces of LIBERTY X-SULFENT-SMOC to be applied per ton of fertilizer}$$

Table 2: Rate Chart for Impregnation of Dry Bulk Fertilizers with LIBERTY X-SULFENT-SMOC

Dry fertilizer rate per acre lb/acre	Fluid Ounces LIBERTY SULFENT-SMOC per ton of fertilizer		
	LIBERTY X-SULFENT-SMOC Use Rate Per Acre		
	19 fl oz/acre	35 fl oz/acre	47 fl oz/acre
200	190	350	470
250	152	280	376
300	127	233	313
350	109	200	269
400	95	175	235
450	84	156	209

Precaution

- To avoid crop injury, **DO NOT** use the herbicide/fertilizer mixture on crops where bedding occurs.

Restrictions

- **DO NOT** impregnate this product onto coated ammonium nitrate, potassium nitrate, or sodium nitrate either alone or in blends with other fertilizers because these materials will not absorb the herbicide.
- **DO NOT** use this product alone or in mixtures on straight limestone, since absorption will not be achieved. Fertilizer blends containing limestone can be impregnated.

Application with Liquid Fertilizer

LIBERTY X-SULFENT-SMOC may be applied using liquid fertilizer or fertilizer and water mixtures as the carrier. Adequate soil coverage is essential to achieve acceptable levels of weed control.

Herbicide mixing, solution stability and/or compatibility problems may occur when liquid fertilizers are used as a carrier. Compatibility tests must be conducted prior to mixing to insure tank mixture compatibility and stability. The use of compatibility agents may be beneficial to achieve and maintain a homogenous solution.

Mixing Instructions for Liquid Fertilizer Applications

Fill the clean spray tank to one half of the total volume with the fertilizer solution. Start the spray tank agitation system. Pre-slurry LIBERTY X-SULFENT-SMOC with water prior to adding to the spray tank. Carefully rinse the empty container, adding the rinsate to the spray tank.

Complete filling the spray tank to the desired level. Sufficient and continuous spray tank agitation is required at all times to maintain a homogenous spray solution. The spray system must be designed such that there is sufficient flow capacity to uniformly apply the spray mixture and maintain adequate tank agitation. Some systems may require separate pumps to simultaneously supply the spray system and the spray tank agitation system. Ensure the LIBERTY X-SULFENT-SMOC slurry is thoroughly mixed before application.

For tank mixtures with other herbicide(s), a compatibility test must be conducted to insure product compatibility before mixing. Read and follow all the directions, precautions and restrictions of the tank mixture products prior to mixing.

Apply the LIBERTY X-SULFENT-SMOC spray mixture immediately after mixing. It is not recommended to store the sprayer overnight or for any extended period of time with the LIBERTY X-SULFENT-SMOC spray mixture remaining in the tank. Thoroughly re-agitate spray mixture if product is left sitting in the tank for extended period of time.

If LIBERTY X-SULFENT-SMOC is mixed and loaded in nurse tanks, thorough agitation of spray solution is required prior to off-loading and application.

Follow all LIBERTY X-SULFENT-SMOC label directions regarding product use rates per acre, registered crops, application instructions, incorporation directions, special instructions and all precautions.

All individual state regulations relating to liquid fertilizer blending, storage, transportation, registration, labeling, and application are the responsibility of the individual and/or company preparing, selling or applying the LIBERTY X-SULFENT-SMOC and fertilizer mixture.

MANDATORY SPRAY DRIFT MANAGEMENT

Aerial Applications:

- **DO NOT** release spray at a height greater than 10 feet above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to select the nozzle and pressure that deliver coarse or coarser droplets (ASABE S641) when product is used as a preemergent/preplant application.
- Applicators are required to select the nozzle and pressure that deliver medium or coarser droplets (ASABE S641) when product is used as postemergence with a contact burndown herbicide.

- Applicators are required to select the nozzle and pressure that deliver medium or coarser droplets (ASABE S641) for all other applications.
- Do not apply when wind speeds exceed 10 mph at the application site. 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. Applicators must use 1/2 swath displacement upwind at the downwind edge of the field.
- **DO NOT** apply during temperature inversions.

Ground Boom Applications:

- User must only apply with the release height recommended by the manufacturer, but no more than 30 inches above the ground or crop canopy.
- Applicators are required to select the nozzle and pressure that deliver coarse or coarser droplets (ASABE S572) when product is used as a preemergent/preplant application.
- Applicators are required to select the nozzle and pressure that deliver medium or coarser droplets (ASABE S572) when product is used as postemergence with a contact burndown herbicide.
- Applicators are required to select the nozzle and pressure that deliver medium or coarser droplets (ASABE S572) for all other applications.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

Boomless Ground Applications:

- Applicators are required to select the nozzle and pressure that deliver coarse or coarser droplets (ASABE S572.3) when product is used as a preemergent/preplant application.
- Applicators are required to select the nozzle and pressure that deliver medium or coarser droplets (ASABE S572.3) when product is used as postemergence with a contact burndown herbicide.
- Applicators are required to select the nozzle and pressure that deliver medium or coarser droplets (ASABE S572.3) for all other applications.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

SPRAY DRIFT ADVISORIES

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

IMPORTANCE OF DROPLET SIZE

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

Controlling Droplet Size – Ground Boom

- **Volume** - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- **Pressure** - Use the lowest spray pressure 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 Drop 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.

Boomless Ground Applications:

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

Handheld Technology Applications

Take precautions to minimize spray drift.

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. Avoid applications during temperature inversions.

WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WINDCONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

Off-Target Movement of LIBERTY X-SULFENT-SMOC

Drift of dilute spray mixtures containing LIBERTY X-SULFENT-SMOC must be prevented. Observation of the environmental conditions, correct application equipment design, calibration and application practices will reduce the risk of off-target spray drift. This product can cause damage by drift on to sensitive crops and other plants. This symptomology may manifest initially as discreet, localized spots where contacted by LIBERTY X-SULFENT-SMOC drift mixtures. Depending on sensitivity of the plants, the concentration of the spray solution and droplets size these spots or lesions may or may not coalesce. These effects will usually not have lasting effects on plant growth, but can reduce the value of affected fruit or foliage where grade or quality is associated with appearance. In drift instances with sensitive crops, defoliation of affected foliage could result.

MAXIMUM ALLOWABLE LIBERTY X-SULFENT-SMOC

Use Per Acre Per 12 Month Cropping Year Period

The total allowed usage includes all applications made to the field per year. This includes all pre-plant and after plant preemerge treatments.

Table 3

Crop	LIBERTY X-SULFENT-SMOC fl. oz./A	Total Lb ai/A	Lb ai sulfentrazone/A	Lb ai s-metolachlor/A
Dry Beans and Peas	52	2.12	0.21	1.91
Horseradish	33.5	1.37	0.14	1.23
Soybeans	52	2.12	0.21	1.91
Sunflowers	52	2.12	0.21	1.91

Restriction

- **DO NOT** exceed maximum allowed use rate of sulfentrazone or S-metolachlor on each crop. Refer to the crop section of this label for specific product use directions.

CROP ROTATIONAL RESTRICTIONS

The following Table 4 shows the minimum interval in months from the time of the last LIBERTY X-SULFENT-SMOC application until LIBERTY X-SULFENT-SMOC treated soil can be replanted to the crops listed. When this product is tank mixed with another herbicide, refer to the partner label for re-cropping instructions, following the directions that are most restrictive.

Some crops have rotational intervals greater than 12 months after a LIBERTY X-SULFENT-SMOC application due to potential crop injury. A representative bioassay of the field shall be completed with the rotational crop to accurately determine the planned crop's sensitivity to this product.

Restriction

- **DO NOT** rotate to food or feed crops other than those listed on the label.

CROP ROTATIONAL RESTRICTIONS

Table 4

Crop	Interval (Months)
Alfalfa	12 ¹
Barley	4.5
Cabbage (transplant only)	2
Cereal Grains (Oats, Pearl Millet, Proso Millet, Teosinte, Wild Rice)	12
Buckwheat	12
Corn, Field	4
Corn, Pop	10
Corn, Sweet	12
Cotton	18 or 12 ²
Cowpea (succulent)	8
Dry Shell Peas	Anytime
Dry Shell Beans	4
Horseradish	Anytime
Limas Beans-Tennessee Only	4
Peanuts	4
Potatoes	4
Rice	10
Rye	4.5
Safflower	Anytime
Sorghum	10
Soybeans	Anytime
Succulent peas	8
Sugar Beets	36 or 24 ³
Sunflowers	Anytime
Triticale	4.5
Tobacco	10
Tomato	4
Wheat	4.5

Crop	Interval (Months)
<p>¹ To avoid injury to rotational alfalfa, (1) DO NOT apply more than 1.9 lb ai S-metolachlor per acre in the previous crop, and (2) DO NOT make lay-by or other postemergent applications of products containing s-metolachlor in the previous crop.</p> <p>² Cotton may be planted after 12 months where this product was applied at rates 48.25 fluid ounces (0.20 lb ai Sulfentrazone and 1.77 lb ai S-metolachlor) per acre or less and meets the following conditions:</p> <ul style="list-style-type: none"> • Medium and fine soils • Soil pH <7.2 • Rainfall or irrigation must exceed 15 inches after application of this product to rotate to cotton <p>³ Sugar beets can be planted after 24 months with a successful bioassay.</p> <p>For all other crops not listed, the rotation interval is a minimum of 12 months with a representative bioassay to determine crop safety before planting.</p>	

REPLANTING INSTRUCTIONS

If initial planting of labeled crops fails to produce a stand, only crops labeled for LIBERTY X-SULFENT-SMOC or the tank mix partner; whichever is most restrictive, may be planted based on the amount of product initially applied. When replanting use minimum soil tillage to preserve the herbicide barrier and achieve maximum weed control.

Restrictions

- **DO NOT** retreat field with this product or other herbicide containing sulfentrazone and s-metolachlor.
- **DO NOT** plant treated fields to any crop at intervals that are inconsistent with the Rotational Crop Guidelines on this label.

BAND TREATMENT APPLICATIONS

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

$$\frac{\text{Band Width in Inches}}{\text{Row Width in Inches}} \times \text{Broadcast Rate Per Acre} = \text{Band Rate}$$

$$\frac{\text{Band Width in Inches}}{\text{Row Width in Inches}} \times \text{Broadcast Volume Per Acre} = \text{Band Volume}$$

MIXING AND LOADING INSTRUCTIONS

LIBERTY X-SULFENT-SMOC may be applied alone, or in tank mixtures with other labeled herbicides for the control of additional weed species. Mixtures with some other pesticides have not been tested. Conduct appropriate compatibility tests prior to tank mixing with other pesticides.

It is important that spray equipment is clean and free of existing pesticide residues before preparing LIBERTY X-SULFENT-SMOC spray mixtures. For all tanks containing spray solution follow the spray tank clean out procedures specified on the label of the product or products previously applied.

For best results fill spray tank with one half of the volume of clean water needed for the field to be treated. Start agitation system. Slowly add the LIBERTY X-SULFENT-SMOC to the spray tank. Carefully rinse the empty container, adding the rinsate to the spray tank. Complete filling the spray tank to the desired level. Continuous spray tank agitation is required at all times to maintain a uniform spray solution. Make sure this product is thoroughly mixed before application.

Use the LIBERTY X-SULFENT-SMOC spray mixture immediately after mixing. Avoid storing the sprayer overnight or for any extended period of time with the LIBERTY X-SULFENT-SMOC spray mixture remaining in the tank.

If LIBERTY X-SULFENT-SMOC is tank mixed with other labeled herbicides, 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.

SPRAYER EQUIPMENT CLEAN-OUT

As soon as possible after spraying this product and before using sprayer equipment for any other applications, the sprayer must be thoroughly cleaned to avoid potential crop affects using the following procedure. Residues left in mixing equipment, spray tanks, hoses, spray booms and nozzles can cause crop effects if they are not properly cleaned. In addition, users must take appropriate steps to ensure proper equipment clean-out for any other products mixed with this product as required on the other product labels. More complete cleaning can be achieved if the spray system is cleaned immediately following the application.

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

If the sprayer has been stored or idle, purge the spray boom and nozzles with clean water before beginning any application.

Should small quantities of this product 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. LIBERTY accepts no liability for any effects due to inadequately cleaned equipment.

Restrictions

- **DO NOT** apply sprayer cleaning solutions or rinsate to sensitive crops.
- **DO NOT** store the sprayer overnight or for any extended period of time with solutions of this product remaining in the tank, spray lines, spray boom plumbing, spray nozzles or strainers.
- **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.

DRY SHELLED BEANS AND PEAS

Dried cultivars of bean (*Lupinus*); bean (*Phaseolus*) (includes field bean, black bean, kidney bean, lima bean (dry), navy bean, pink bean, pinto bean, tepary bean), small red bean, great northern bean; bean (*Vigna*) (includes adzuki bean, blackeyed pea, catjang, cowpea, crowder pea moth bean, lentil, mung bean, rice bean, southern pea, urd bean); broad bean (dry); guar; lab lab bean; pea (*Pisum*) (includes field pea and chickpea) and pigeon pea.

Table 5

LIBERTY X-SULFENT-SMOC Use Rate (Dry Shelled Beans and Peas)			
Fall or Spring Early Preplant, Preemergence and Preplant Incorporated Applications			
Broadcast Rate	Fluid Ounces of LIBERTY X-SULFENT-SMOC per acre		
% Organic Matter	Soil Texture		
	Coarse	Medium	Fine

< 1.5	DO NOT USE	25.5 – 35 (0.10 – 0.14 lb ai Sulfentrazone 0.94 – 1.28 lb ai S-metolachlor)	25.5 – 35 (0.10 – 0.14 lb ai Sulfentrazone 0.94 – 1.28 lb ai S-metolachlor)
1.5 – 3.0	25.5 – 35 (0.10 – 0.14 lb ai Sulfentrazone 0.94 – 1.28 lb ai S-metolachlor)	28 – 43 (0.12 – 0.17 lb ai Sulfentrazone 1.03 – 1.58 lb ai S-metolachlor)	35 – 43 (0.14 – 0.17 lb ai Sulfentrazone 1.28 – 1.58 lb ai S-metolachlor)
>3	28 – 35 (0.11 – 0.14 lb ai Sulfentrazone 1.03 – 1.28 lb ai S-metolachlor)	35 – 43 (0.14 – 0.17 lb ai Sulfentrazone 1.28 – 1.58 lb ai S-metolachlor)	43 – 52 0.17 – 0.21 lb ai Sulfentrazone 1.58 – 1.91 lb ai S-metolachlor)
Refer to the previous information on soil types under the COARSE, MEDIUM, and FINE categories. For soil with pH >7.2 use the lowest rate for that specific soil texture and organic matter.			

Weeds Controlled

The following is a general list of weeds for which LIBERTY X-SULFENT-SMOC has shown control or suppression. The level of control will vary per use rate, cropping system, environmental conditions, moisture levels and soil type. This product may not control all of the weeds listed under all crop conditions. For crops where lower use rates are needed for crop tolerance refer to their specific weed list.

Amaranth, Palmer	Morningglory, tall
Barnyardgrass	Nightshade, black
Fall Panicum	Nightshade, Eastern black
Foxtail, giant	Pigweed, red root
Foxtail, green	Pigweed, smooth
Foxtail, yellow	Thistle, Russian
Kochia (ALS and Triazine Resistant)	Waterhemp, common
Lambsquarters, common	Waterhemp, tall
Morningglory, ivyleaf	Witch grass

Note: Partial control will occur under dry conditions, under heavy pest pressure or at low use rates under 35 fluid ounces (0.14 lb ai Sulfentrazone and 1.28 lb ai S-metolachlor) Under these conditions plan to use a labeled post-emergence herbicide for improved control.

FALL APPLICATION

LIBERTY X-SULFENT-SMOC may be applied in the fall following crop harvest or in existing fallow fields to control or suppress weeds the following year. This product should be applied to the harvested crop stubble or soil surface without incorporation. Moisture in the form of rain or snow will move and activate the product. **DO NOT** mechanically incorporate in the fall or spring after application because this activity may destroy the herbicide barrier and weed escapes can occur. **DO NOT** apply to frozen soils to prevent LIBERTY X-SULFENT-SMOC runoff from rain or snow that may occur following application. This product may be tank mixed with other labeled herbicides to control emerged weeds. When activating moisture is not received a planned post-emergence application of a labeled herbicide will be needed for optimum weed control. If an activating rainfall (1/2 to 1 inch) is not received this product will provide a reduced and inconsistent level of control of susceptible germinating weeds. If dry conditions persist, weed control may be reduced. Fall application of LIBERTY X-SULFENT-SMOC may require a follow up grass herbicide treatment as grass escapes may occur.

LIBERTY X-SULFENT-SMOC should be applied when the sustained soil temperature is 55°F and falling at a soil depth of 4 inches. Applications to ridge till production systems must be made after the formation of ridges or bedded.

For Fall Application

- Apply after September 30 in ND, SD, MN and WI, and north of Route 30 in IA.
- Apply after October 15 north of Route 91 in NE and south of Route 30 in IA.
- Apply after October 31 north of Route 136 in IL

LIBERTY X-SULFENT-SMOC can be tank mixed with other labeled herbicides. Observe all restrictions, precautions, instructions, and rotational cropping guidelines of each product's label when tank mixing, including all references to potential carryover and crop injury warnings or restrictions.

Early Preplant and Preemergence (Spring Applications)

LIBERTY X-SULFENT-SMOC can be applied early preplant or preemergence up to 3 days after planting if seedlings have not broken the soil surface and if the seed furrow is completely closed and completely covered with soil. Adequate moisture (1/2 to 1 inch) is required for herbicide activation from rainfall. If adequate moisture is not received within 7 to 10 days after the LIBERTY X-SULFENT-SMOC treatment, a shallow incorporation (less than 2 inches) may be needed to obtain desired weed control. When activating moisture is not received a planned post-emergence application of a labeled herbicide will be needed for optimum weed control. If an activating rainfall (1/2 to 1 inch) is not received this product will provide a reduced and inconsistent level of control of susceptible germinating weeds. If dry conditions persist, weed control may be reduced.

If weeds are emerged at the time of LIBERTY X-SULFENT-SMOC application, use a burndown herbicide such as carfentrazone-ethyl, glyphosate or paraquat at the full-labeled rate in combination with this product as needed.

Preplant Incorporated (PPI)

LIBERTY X-SULFENT-SMOC can be applied as a Preplant Incorporated treatment in the spring prior to planting in reduced and conventional tillage dry beans and peas. This product should be shallowly incorporated in the soil no deeper than 2 inches. Incorporating this product deeper than 2 inches can result in inconsistent weed control. Minimize furrow and ridge formation in the tillage operations. Use the appropriate rate from Table 5 above for the soil texture, soil organic matter, and soil pH level.

Precautions

- Under extended periods of dry weather, adequate weed control may not be achieved. Adequate moisture (1/2 to 1 inch) is required for herbicide activation from rainfall. If adequate moisture is not received within 7 to 10 days after treatment with this product, a shallow incorporation may be needed to obtain desired weed control. When activating moisture is not received a planned post-emergence application of a labeled herbicide will be needed for optimum weed control. If an activating rainfall (1/2 to 1 inch) is not received this product will provide a reduced and inconsistent level of control of susceptible germinating If dry conditions persist, weed control may be reduced.
- Adverse crop response may occur on coarse textured soils with low organic matter (less than 1.5%) and pH of 7.2 or higher, or on highly eroded soils, hilltops, or in areas of calcareous outcroppings. Use rates of this product should be reduced to 17 fluid ounces (0.07 lb ai Sulfentrazine and 0.62 lb ai S-metolachlor) in those areas or not applied in these areas at all. Inadequate seed furrow closure or shallow planting (less than 1.5 inch) may result in undesirable crop response and this product should not be applied. Poor growing conditions such as excessive moisture, low temperatures, soil compaction and diseases may also cause undesirable crop response.

These Crop Specific Use directions are based upon the interactive effects of LIBERTY X-SULFENT-SMOC and the primary soil and environmental factors, which affect its activity on various weed species and tolerance among crops. The user is required to observe the instructions and guidance previously presented under Product Application Instructions, LIBERTY X-SULFENT-SMOC Product Use Rates, Rotational Crop Guidelines, Replanting Instructions, Weeds Controlled, Crop Liability Disclaimer and any other section of this label pertinent to the anticipated crop use. It is important to note that not all varieties or cultivars of a given crop species have been evaluated under treatment with this product. Consult seed companies and university or extension weed management personnel for additional information on specific local varieties or cultivars and any other pertinent information on this product under specific local conditions.

Restrictions

- **DO NOT** apply more than 52 fluid ounces (0.21 lb ai Sulfentrazone and 1.91 lb ai S-metolachlor) per acre per year.
- **DO NOT** apply additional sulfentrazone containing products to dry field beans and peas if this product has been previously applied within the same twelve-month period.
- **DO NOT** apply after crop emerges, or if the seedling is close to the soil surface.
- **DO NOT** incorporate to depths greater than 2 inches.
- **DO NOT** apply to frozen soils or to existing snow cover to prevent runoff of this product from rain or snow melt that may occur following application.
- **DO NOT** use on soils classified as sand, which have less than 1% organic matter.
- **DO NOT** use for forage within 60 days after an application of this product.
- **DO NOT** cut for hay within 120 days after an application of this product.

HORSERADISH

Apply a single application of LIBERTY X-SULFENT-SMOC at a broadcast rate of 25.5 to 33.5 fluid ounces (0.10 to 0.14 lb ai Sulfentrazone and 0.94 to 1.23 lb ai S-metolachlor) per acre to the soil surface after planting but before weed or crop emergence. Use listed lower rates on soils relatively coarse- textured and listed higher rates on fine textured soils.

Apply in at least 10 gallons per acre finished spray solution by ground.

Following the application of LIBERTY X-SULFENT-SMOC to soil, germinating seeds and seedlings take up this product from the soil solution. The amount of this product in soil solution available for weed uptake is determined primarily by soil type, soil organic matter and soil pH. Similar to other herbicides, this product adsorbs to the clay and organic matter (OM) fractions of soils; effectively limiting the amount of active ingredient immediately available to control weeds. Adequate moisture is required for herbicide activation (1/2 to 1 inch of rainfall or irrigation). If an activating rainfall (1/2 to 1 inch) is not received this product will provide a reduced level of control of susceptible germinating weeds.

Harvest horseradish at normal timing.

Weeds Controlled:

The following is a general list of weeds for which LIBERTY X-SULFENT-SMOC has shown control or suppression. The level of control will vary per use rate, cropping system, environmental conditions, moisture levels and soil type. This product may not control all of the weeds listed under all crop conditions. For crops where lower use rates are needed for crop tolerance refer to their specific weed list.

Barnyardgrass	Nightshade, black
Fall panicum	Nightshade, eastern
Foxtail, giant	Black palmer amaranth
Foxtail, green	Pennsylvania smartweed
Foxtail, yellow	Pigweed, red root
Morningglory, entireleaf	Pigweed, smooth
Morningglory, ivyleaf	Waterhemp, common
Morningglory, pitted	Waterhemp, tall
Morningglory, smallflower	

Restrictions

- **DO NOT** apply more than 33.5 fluid ounces (0.14 lb ai sulfentrazone and 1.23 lb ai S-metolachlor) per acre per year.
- **DO NOT** use on soils classified as sand, which have less than 1% organic matter.
- **DO NOT** apply directly on the crop after the crop emerges or if the seedling sprouts are close to the soil surface.

SOYBEANS

Table 6

LIBERTY X-SULFENT-SMOC Use Rate (Soybeans)			
Fall, Spring Early Preplant, Preemergence and Preplant Incorporated Applications			
Broadcast Rate	Fluid Ounces of LIBERTY X-SULFENT-SMOC per acre		
% Organic Matter	Soil Texture		
	Coarse	Medium	Fine
< 1.5	25.5 – 33.5 (0.10 – 0.14 lb ai Sulfentrazone 0.94 – 1.23 lb ai S-metolachlor)	33.5 – 43 (0.14 – 0.17 lb ai Sulfentrazone 1.23 – 1.58 lb ai S-metolachlor)	33.5 – 43 (0.14 – 0.17 lb ai Sulfentrazone 1.23 – 1.58 lb ai S-metolachlor)
1.5 – 3.0	33.5 (0.14 lb ai Sulfentrazone 1.23 lb ai S- metolachlor)		
>3	33.5 (0.14 lb ai Sulfentrazone 1.23 lb ai S-metolachlor)		43 – 52 (0.17 – 0.21 lb ai Sulfentrazone 1.58 – 1.91 lb ai S-metolachlor)
Refer to the previous information on soil types under the COARSE, MEDIUM, and FINE categories. For soil with pH >7.2 use the lowest rate for that specific soil texture and organic matter.			

Weeds Controlled

The following is a general list of weeds for which LIBERTY X-SULFENT-SMOC has shown control or suppression. The level of control will vary per use rate, cropping system, environmental conditions, moisture levels and soil type. This product may not control all of the weeds listed under all crop conditions.

Common Name	Scientific Name
Amaranth, Palmer	<i>Amaranthus palmeri</i>
Amaranth, spiny	<i>Amaranthus, spinosus</i>
Amaranth, spleen	<i>Amaranthus dubius</i>
Barnyardgrass	<i>Echinochloa crus-galli (L.) Beauv.</i>
Broadleaf signalgrass	<i>Urochloa platyphylla (Nash) R. D. Webster</i>
Copperleaf, hophornbeam	<i>Acalypha ostryifolia Riddell</i>
Crabgrass spp.	<i>Digitaria spp.</i>
Crowfootgrass	<i>Dactyloctenium aegyptium (L.) Willd.</i>
Cupgrass, prairie	<i>Eriochloa contracta Hitchc.</i>
Cupgrass, southwestern	<i>Eriochloa acuminata (J. Presl) Kunth</i>
Fall Panicum	<i>Panicum dichotomiflorum Michx.</i>
Florida pusley	<i>Richardia scabra L.</i>
Foxtail, giant	<i>Setaria faberi Herrm.</i>
Foxtail, green	<i>Setaria viridis (L.) Beauv.</i>
Foxtail, robust	<i>Setaria viridis var. robusta</i>
Foxtail, yellow	<i>Setaria glauca (L.) Beauv.</i>
Foxtail, bristly	<i>Setaria verticillata (L.) Beauv.</i>
Goosegrass	<i>Eleusine indica (L.) Gaertn.</i>
Groundcherry, cutleaf	<i>Physalis angulata L.</i>
Hairy galinsoga	<i>Galinsoga ciliata (Raf.) Blake</i>
Kochia (ALS and Triazine Resistant)	<i>Kochia scoparia (L.) Schrad.</i>
Lambsquarters, common	<i>Chenopodium album</i>
Morningglory, entireleaf	<i>Ipomea hederacea integrusc</i>

Common Name	Scientific Name
Morningglory, ivyleaf	<i>Ipomea hederacea hederacea</i>
Morningglory, Palmleaf	<i>Ipomea Wrightii</i>
Morningglory, pitted	<i>Ipomoea lacunosa L.</i>
Morningglory, purple	<i>Ipomea turbinate</i>
Morningglory, red	<i>Ipomea coccinea</i>
Morningglory, scarlet	<i>Ipomea hederifolia</i>
Morningglory, small flower	<i>Jacquemontia tamnifolia (L.) Griseb.</i>
Morningglory, tall	<i>Ipomea, purpurea</i>
Nightshade, black	<i>Solanum nigrum</i>
Nightshade, Eastern black	<i>Solanum americanum</i>
Pigweed, red root	<i>Amaranthus retroflexus</i>
Pigweed, smooth	<i>Amaranthus hybridus</i>
Pigweed, spiny	<i>Amaranthus</i>
Sida, prickly	<i>Sida spinosa L.</i>
Smartweed, Pennsylvania (seedling)	<i>Polygonum pensylvanicum L.</i>
Star of Bethlehem	<i>Ornithogalum umbellatum L.</i>
Texas panicum	<i>Panicum texanum L</i>
Thistle, Russian	<i>Salsola tragus L.</i>
Tropical Spiderwort	<i>Commelina benghalensis L.</i>
Waterhemp, common	<i>Amaranthus rudis</i>
Waterhemp, tall	<i>Amaranthus tuberculatos</i>
Witch grass	<i>Panicum capillare L.</i>
SEDGES (suppression only)	
Nutsedge, purple	<i>Cyperus rotundus</i>
Nutsedge, yellow	<i>Cyperus esculentus</i>
Sedge, annual	<i>Cares spp.</i>

Fall Applications

LIBERTY X-SULFENT-SMOC may be applied as a fall treatment to the stubble of harvested crops for preemergence control of labeled weeds the following spring in no-till and conservation tillage production systems. Fall applications of this product must be made in weed control programs that include, as needed, spring application of preplant, preemergence or postemergence herbicides for the following crop year. Applications to ridge till production systems must be made after the formation of ridges or bedded. Apply when the sustained soil temperature at a 4-inch depth is less than 55°F and falling.

If weeds are emerged at the time of application, utilize a tank mixture with a suitable burndown herbicide at labeled rates.

For Fall Application:

- Apply after September 30 in ND, SD, MN, WI and north of Route 30 in IA.
- Apply after October 15 north of Route 91 in NE and south of Route 30 in IA.
- Apply after October 31 north of Route 136 in IL.
- **DO NOT** make fall applications south of Interstate 70.

Early Preplant, Preplant Incorporated and Preemergence Applications (Spring Applications):

Use on medium to fine soils with minimum tillage or no-tillage systems in CO, CT, DE, IA, IL, IN, KS, KY, MA, MD, ME, MI, MN, MO, MT, ND, NE, NH, NY, OH, PA, RI, SD, TN, VA, VT, WI WV, WY. LIBERTY X-SULFENT-SMOC can be applied Early Preplant, Preplant Incorporated or Preemergence up to 3 days after planting but prior to emergence. For preplant incorporated applications, incorporation must be uniform and no deeper than 2 inches. Improper soil incorporation may result in erratic weed control and/or crop injury. This product applied near or after crop emergence may cause severe injury to the crop. This product can be applied alone or in combination with other soybean herbicides, including those containing sulfentrazone, as long as the sulfentrazone active ingredient rate does not exceed 0.375 lb ai per acre per year. This product may be followed by labeled postemergence soybean herbicides for increased control of grass and

broadleaf weeds. Always follow the most restrictive label when tank mixing. When using LIBERTY X-SULFENT-SMOC in no-till or minimum till cropping systems, tank mix with an appropriate burndown herbicide for improved control of existing weeds. Apply on coarse soils no more than 2 weeks prior to planting.

Precautions

- When applying this product with other registered herbicides, refer to specific label information on precautions, restrictions, instructions, limitations, application methods and timings, and weeds controlled.

Restrictions

- **DO NOT** apply more than 52 fluid ounces (0.21 lb ai Sulfentrazone and 1.91 lb ai S-metolachlor per acre per year.
- **DO NOT** apply more than 0.375 lb ai sulfentrazone total per acre per year.
- **DO NOT** apply more than 2.387 lb ai s-metolachlor per acre per year.
- **DO NOT** graze or feed treated soybean forage, hay or straw to livestock for 30 days after treatment.
- **DO NOT** use on soils classified as sand, which have less than 1% organic matter.
- **DO NOT** apply to frozen soils or existing snow cover to prevent runoff of this product from rain or snowmelt that may occur following application.
- **DO NOT** apply after crop seed germination.

SUNFLOWERS

Table 7

LIBERTY X-SULFENT-SMOC Use Rate (Sunflowers) Preemergence and Preplant Incorporated Applications			
Broadcast Rate	Fluid Ounces of LIBERTY X-SULFENT-SMOC per acre		
% Organic Matter	Soil Texture		
	Coarse	Medium	Fine
< 1.5	25.5 – 28 (0.10 – 0.11 lb ai Sulfentrazone 0.94 – 1.03 lb ai S-metolachlor)	25.5 – 33.5 (0.10 – 0.14 lb ai Sulfentrazone 0.94 – 1.23 lb ai S-metolachlor)	28 – 40.25 (0.11 – 0.16 lb ai Sulfentrazone 1.03 – 1.48 lb ai S-metolachlor)
1.5 – 3.0	25.5 – 33.5 (0.10 – 0.14 lb ai Sulfentrazone 0.94 – 1.23 lb ai S-metolachlor)	28 -43 (0.11 – 0.17 lb ai Sulfentrazone 1.03 – 1.58 lb ai S-metolachlor)	33.5 – 43 (0.14 – 0.17 lb ai Sulfentrazone 1.23 – 1.58 lb ai S-metolachlor)
>3	28 – 33.5 (0.11 – 0.14 lb ai Sulfentrazone 1.03 – 1.23 lb ai S-metolachlor)	33.5 – 43 (0.14 – 0.17 lb ai Sulfentrazone 1.23 – 1.58 lb ai S-metolachlor)	43 – 52 (0.17 – 0.21 lb ai Sulfentrazone 1.58 – 1.91 lb ai S-metolachlor)
Refer to the previous information on soil types under the COARSE, MEDIUM, and FINE categories. For soil with pH >7.2 use the lowest rate for that specific soil texture and organic matter.			

Weeds Controlled

When applied according to directions in sunflower, LIBERTY X-SULFENT-SMOC will provide control of:

Amaranth, Palmer	Morningglory, tall
Barnyardgrass	Nightshade, black
Fall Panicum	Nightshade, Eastern black
Foxtail, giant	Pigweed, red root
Foxtail, green	Pigweed, smooth
Foxtail, yellow	Thistle, Russian
Kochia (ALS and Triazine Resistant)	Waterhemp, common
Lambsquarters, common	Waterhemp, tall

Morningglory, ivyleaf	Witch grass
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Note: Partial control will occur under dry conditions, under heavy pest pressure or at low use rates under 35 fluid ounces (0.14 lb ai Sulfentrazone and 1.28 lb ai S-metolachlor). Under these conditions plan to use a labeled post-emergence herbicide for improved control.

Preemergence (Spring Applications)

LIBERTY X-SULFENT-SMOC can be applied preemergence up to 3 days after planting as a soil surface application if seedlings have not broken the soil surface and if the seed furrow is completely closed and completely covered with soil. Adequate moisture (1/2 to 1 inch) is required for herbicide activation from rainfall or irrigation. If adequate moisture is not received within 7 to 10 days after treatment with this product, a shallow incorporation may (less than 2 inches) be needed to obtain desired weed control. When activating moisture is not received a planned post-emergence application of a labeled herbicide will be needed for optimum weed control. If an activating rainfall (1/2 to 1 inch) is not received this product will provide a reduced and inconsistent level of control of susceptible germinating weeds. If dry conditions persist, weed control may be reduced. If applying on coarse soils with less than 1.5% organic matter, wait a minimum of 7 days after application before planting.

If weeds are emerged at the time of LIBERTY X-SULFENT-SMOC application, use a labeled burndown herbicide such as carfentrazone-ethyl, glyphosate or paraquat at the full-labeled rate in combination with this product as needed.

Spring Preplant Incorporated (PPI)

When planting into soil treated preplant with LIBERTY X-SULFENT-SMOC minimize soil disturbance to maintain the herbicide barrier on the soil surface to achieve maximum weed control. This product can be applied as a Preplant Incorporated treatment in the spring up to 2 weeks prior to planting in reduced and conventional tillage sunflowers. This product should be shallowly incorporated in the soil no deeper than 2 inches. Incorporating this product deeper than 2 inches can result in inconsistent weed control. Use the appropriate rate from Table 7 above for the soil texture, soil organic matter, and soil pH level.

Precautions

- Plant sunflowers 1.5 inches deep and completely cover with soil.
- Adverse crop response may occur on coarse textured soils with low organic matter (less than 1.5%) and pH of 7.2 or higher, or on highly eroded soils, hilltops, or in areas of calcareous outcroppings. Use rates of this product should be reduced to 18.75 fluid ounces (0.08 lb ai Sulfentrazone and 0.70 lb ai S-metolachlor) in those areas or not applied in these areas at all. Inadequate seed furrow closure or shallow planting (less than 1.5 inch) may result in undesirable crop response and this product should not be applied. Poor growing conditions such as excessive moisture, low temperatures, soil compaction and diseases may also cause undesirable crop response.

These Crop Specific Use directions are based upon the interactive effects of LIBERTY X-SULFENT-SMOC and the primary soil and environmental factors, which affect its activity on various weed species and tolerance among crops. The user is required to observe the instructions and guidance previously presented under Product Application Instructions, LIBERTY X-SULFENT-SMOC Product Use Rates, Rotational Crop Guidelines, Replanting Instructions, Weed Controlled and any other section of this label pertinent to the anticipated crop use. It is important to note that not all varieties or cultivars of a given crop species have been evaluated under treatment with this product. Consult seed companies and university or extension weed management personnel for additional information on specific local varieties or cultivars and any other pertinent information on this product under specific local conditions.

Restrictions

- **DO NOT** apply more than 52 fluid ounces (0.21 lb ai Sulfentrazone and 1.91 lb ai S-metolachlor) per acre per year.
- **DO NOT** apply herbicides containing sulfentrazone to sunflowers if this product has been previously applied within the same twelve-month period.

- **DO NOT** apply to frozen soils or existing snow cover to prevent runoff of this product from rain or snowmelt that may occur following application.
- **DO NOT** allow livestock to graze or feed in treated area.
- **DO NOT** apply after crop seed germination.
- **DO NOT** use on soils classified as sand, which have less than 1% organic matter.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store product in original container only, away from other pesticides, fertilizer, food or feed. **DO NOT** use or store around the home. Do not store below 32°F. Product that has been frozen should be thawed and recirculated prior to its use. Store in a cool, dry place and avoid excess heat.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. In the event of a major spill, fire, or other emergency, call CHEMTREC, **1-800-424-9300**, day or night. **To confine spill:** If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

Pesticide Disposal: Pesticide wastes are acutely hazardous. 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. Waste resulting from the use of this product must be disposed of at an approved waste disposal facility.

Container Handling

NONREFILLABLE CONTAINER (EQUAL TO OR LESS THAN 5 GALLONS): DO NOT reuse or refill this container. Triple rinse or pressure rinse container promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 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. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

NONREFILLABLE CONTAINER (GREATER THAN 5 GALLONS): DO NOT reuse or refill this container. Triple rinse or pressure rinse container promptly after emptying. **Triple rinse as follows:** 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. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Pressure rinse as follows (all sizes): 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. Repeat this procedure two more times. Then offer for recycling if available, or reconditioning, or puncture and dispose of in a sanitary landfill, or other procedures allowed by state and local authorities.

REFILLABLE CONTAINER: Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. After triple rinsing is complete, and the container is not suitable for refilling or reconditioning, offer the container for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of LIBERTY CROP PROTECTION, LLC or Seller. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW all such risks shall be assumed by Buyer and User and Buyer and User agree to hold LIBERTY CROP PROTECTION, LLC and Seller harmless for any claims relating to such factors.

LIBERTY CROP PROTECTION, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or LIBERTY CROP PROTECTION, LLC, and TO THE EXTENT CONSISTENT WITH APPLICABLE LAW Buyer and User assume the risk of any such use. To the extent consistent with applicable law LIBERTY CROP PROTECTION, LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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

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

All trademarks are the property of their respective owners.

[BASE LABEL AFFIXED TO CONTAINER EQUAL TO OR LESS THAN 5 GALLONS]

SULFENTRAZONE	GROUP	14	HERBICIDE
S-METOLACHLOR	GROUP	15	HERBICIDE

LIBERTY X-SULFENT-SMOC

HERBICIDE

FOR USE IN DRY SHELLED BEANS AND PEAS, HORSERADISH, SOYBEANS AND SUNFLOWERS

ACTIVE INGREDIENTS:	% BY WT.
Sulfentrazone	5.67%
S-metolachlor	51.20%
OTHER INGREDIENTS*:	43.13%
TOTAL:	100.00%

Contains a total of 5.22 lb/gal which include 0.52 lb ai sulfentrazone and 4.7 lb ai s-metolachlor per gallon.

*Contains petroleum distillates.

KEEP OUT OF REACH OF CHILDREN CAUTION / PRECAUCIÓN

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).

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300
See inside booklet for additional Precautionary Statements and Directions for Use.
Not for Sale, Sale into, Distribution and/or Use in Nassau and Suffolk Counties of New York State.

FIRST AID	
IF SWALLOWED:	Immediately call a poison control center or doctor. DO NOT induce vomiting unless told to do so by a poison control center or doctor. DO NOT give any liquid to the person. DO NOT give anything by mouth to an unconscious person.
IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
IF INHALED:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
HOTLINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378 or your poison control center at 1-800-222-1222 . For Chemical Spill, Leak, Fire or Exposure, call CHEMTREC 800-424-9300 .	
NOTE TO PHYSICIAN: May pose an aspiration pneumonia hazard. Contains petroleum distillate.	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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

USER SAFETY RECOMMENDATIONS

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

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and 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 washwaters or rinsate.

Refer to label for complete Groundwater, Surface Water and Non-Target Organism Advisories.

PHYSICAL AND CHEMICAL HAZARDS

DO NOT use or store near heat or open flame.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store product in original container only, away from other pesticides, fertilizer, food or feed. **DO NOT** use or store around the home. **DO NOT** store below 32°F. Product that has been frozen should be thawed and recirculated prior to its use. Store in a cool, dry place and avoid excess heat.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. In the event of a major spill, fire, or other emergency, call CHEMTREC, **1-800-424-9300**, day or night. **To confine spill:** If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

Pesticide Disposal: Pesticide wastes are acutely hazardous. 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. Waste resulting from the use of this product must be disposed of at an approved waste disposal facility.

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EPA Reg. No.: 89168-89
EPA Est. No.: _____
NET CONTENTS: ___ Gal. (___ L)

Manufactured for:
LIBERTY CROP PROTECTION, LLC
1880 Fall River Drive, Suite 100
Loveland, CO 80538

[BASE LABEL AFFIXED TO CONTAINER GREATER THAN 5 GALLONS OR RETURNABLE]

SULFENTRAZONE	GROUP	14	HERBICIDE
S-METOLACHLOR	GROUP	15	HERBICIDE

LIBERTY X-SULFENT-SMOC

HERBICIDE

FOR USE IN DRY SHELLED BEANS AND PEAS, HORSERADISH, SOYBEANS AND SUNFLOWERS

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Contains a total of 5.22 lb/gal which include 0.52 lb ai sulfentrazone and 4.7 lb ai s-metolachlor per gallon.

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(If you do not understand the label, find someone to explain it to you in detail).

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300
See inside booklet for additional Precautionary Statements and Directions for Use.
Not for Sale, Sale into, Distribution and/or Use in Nassau and Suffolk Counties of New York State.

FIRST AID	
IF SWALLOWED:	Immediately call a poison control center or doctor. DO NOT induce vomiting unless told to do so by a poison control center or doctor. DO NOT give any liquid to the person. DO NOT give anything by mouth to an unconscious person.
IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
IF INHALED:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
HOTLINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378 or your poison control center at 1-800-222-1222 . For Chemical Spill, Leak, Fire or Exposure, call CHEMTREC 800-424-9300 .	
NOTE TO PHYSICIAN	
May pose an aspiration pneumonia hazard. Contains petroleum distillate.	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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

USER SAFETY RECOMMENDATIONS

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

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and 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 washwaters or rinsate.

Note to reviewer: Either Option 1 or 2 will be used based on the amount of space available on the base label.

Option 1:

Groundwater Advisory

Metolachlor/S-metolachlor and Sulfentrazone are known to leach through soil into groundwater under certain conditions as a result of label use. This product may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

DO NOT use on coarse soils classified as sand, which have less than 1% organic matter.

Surface Water Advisory

S-metolachlor and Sulfentrazone may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow groundwater. This product is classified as having high potential for reaching surface water via runoff for several weeks or months after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of metolachlor/S-metolachlor from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

Non-Target Organism Advisory

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

Reporting Ecological Incidents:

To report ecological incidents, including mortality, injury, or harm to plants and animals, call 844-425-8488.

Option 2:

Refer to label for complete Groundwater, Surface Water and Non-Target Organism Advisories.

PHYSICAL AND CHEMICAL HAZARDS

DO NOT use or store near heat or open flame.

[Optional: Agricultural Use Requirements]

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. These requirements 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-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 over short-sleeve shirt and short pants, chemical-resistant gloves made of barrier laminate, nitrile rubber > 14 mils, butyl rubber > 14 mils, or Viton > 14 mils, and chemical-resistant footwear plus socks.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store product in original container only, away from other pesticides, fertilizer, food or feed. **DO NOT** use or store around the home. **DO NOT** store below 32°F. Product that has been frozen should be thawed and recirculated prior to its use. Store in a cool, dry place and avoid excess heat.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. In the event of a major spill, fire, or other emergency, call CHEMTREC, **1-800-424-9300**, day or night. **To confine spill:** If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

Pesticide Disposal: Pesticide wastes are acutely hazardous. 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. Waste resulting from the use of this product must be disposed of at an approved waste disposal facility.

Container Handling

NONREFILLABLE CONTAINER (GREATER THAN 5 GALLONS): DO NOT reuse or refill this container. Triple rinse or pressure rinse container promptly after emptying. **Triple rinse as follows:** 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. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Pressure rinse as follows (all sizes): 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. Repeat this procedure two more times. Then offer for recycling if available, or reconditioning, or puncture and dispose of in a sanitary landfill, or other procedures allowed by state and local authorities.

REFILLABLE CONTAINER: Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. After triple rinsing is complete, and the container is not suitable for refilling or reconditioning, offer the container for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

EPA Reg. No.: 89168-89
EPA Est. No.: _____
NET CONTENTS: ___ Gal. (___ L)

Manufactured for:
LIBERTY CROP PROTECTION, LLC
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