

**ADVASEAL® HSM  
HERBICIDAL PLASTIC FUMIGATION FILM**

ADVASEAL® HSM is a plastic mulch film that releases a selective herbicide to control certain broadleaf weeds and nutsedge in selected crops and can be used to reduce fumigant emissions. Only the inside layer of the product roll contains an herbicide.

THE ACTIVE LAYER OF EACH THICKNESS OF ADVASEAL® HSM FILM CONTAINS:  
0.110 oz of Halosulfuron-methyl /10,000 ft<sup>2</sup>

THE COMPLETE LABEL FOR THIS PRODUCT CONSISTS OF THE CONTAINER LABEL AND BOOKLET ATTACHED TO SHIPPING CONTAINER. READ AND UNDERSTAND THE ENTIRE LABEL FOR DIRECTIONS FOR USE, PRECAUTIONS AND RESTRICTIONS.

WHEN USED WITH A FUMIGANT, OBSERVE THE MOST RESTRICTIVE OF THE LABELING LIMITATIONS AND PRECAUTIONS OF BOTH ADVASEAL® HSM FILM AND THE FUMIGANT PRODUCT. THE USER MUST ENSURE THAT THE FUMIGANT PRODUCT IS REGISTERED FOR THE INTENDED USE ACCORDING TO THE LABEL.

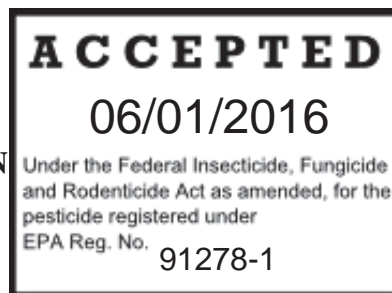
Active Ingredient*	...Halosulfuron-methyl.....	0.00705%
Other Ingredients*	.....	99.99295%
Total:.....	.....	100.00000%

\*% weight calculations are based upon 2 MIL\*\* ADVASEAL® HSM / 10,000 ft<sup>2</sup>.]

<u>ALTERNATE ADVASEAL® HSM FILMS BY THICKNESS**</u>			
	<b>1 MIL**</b>	<b>1.25 MIL**</b>	<b>1.5 MIL**</b>
Active Ingredient: Halosulfuron-methyl.....	0.01277%	0.01061%	0.00908%
Other Ingredients: .....	99.98723%	99.98938%	99.99092%
Total: .....	100.00000%	100.00000%	100.00000%

\* \* EACH THICKNESS ( 1, 1.25, 1.5, and 2.0 MIL) OF ADVASEAL® HSM film contains  
0.110 oz of Halosulfuron-methyl /10,000 ft<sup>2</sup>

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**



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

**FIRST AID**

**IF ON SKIN  
OR  
CLOTHING**

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20minutes.
- Call a poison control center or doctor for treatment advice.

**YOU MAY ALSO CONTACT 919-280-9220 TOLL FREE FOR EMERGENCY  
MEDICAL TREATMENT INFORMATION**

EPA Registration No. 91278-1  
EPA Establishment No. 86014-CO-001  
No. 91278-NC-001

Produced for:  
Imaflex, Inc.  
5710 rue Notre Dame West  
Montreal, Quebec  
Canada H4C 1V2

Batch/Lot:

Net contents: Contains 0.110 oz. of Halosulfuron-methyl/ 10,000 ft<sup>2</sup>

## **PRECAUTIONARY STATEMENTS**

### **HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

#### **CAUTION**

Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing.

### **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

- Handlers must wear long sleeve shirt and long pants, socks, shoes and chemical resistant gloves.
- Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

### **USER SAFETY RECOMMENDATION**

- Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

## **ENVIRONMENTAL HAZARDS**

The herbicide chemical incorporated into this plastic mulch film demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the groundwater is shallow, may result in groundwater contamination. Runoff may be hazardous to aquatic organisms in water adjacent to treated areas. The chemical in this film is toxic to non-target vascular plants.

### **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. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

## **AGRICULTURAL USE REQUIREMENTS**

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

Do not enter or allow worker entry into treated areas during the REI of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated is:

- coveralls
- chemical-resistant gloves made of any waterproof material
- shoes plus socks.

## **PRODUCT INFORMATION**

ADVASEAL® HSM is a plastic mulch film that releases a selective herbicide to control certain broadleaf weeds and nutsedge in selected crops and can be used to reduce fumigant emissions. ADVASEAL® HSM can be absorbed through roots, shoots and foliage and is translocated within the plant. Use ADVASEAL® HSM only in accordance with its labeling and worker protection standards for registered crops to control listed broadleaf weeds, and nutsedge.

## **WEED RESISTANCE STATEMENT**

Weeds can develop resistance to herbicides. Some weed biotypes have inherent resistance to certain herbicides. Repeated use of herbicides with similar modes of action can result in the development of resistance in weed populations. ADVASEAL® HSM contains an herbicide that is a member of the sulfonylurea family and is an ALS enzyme inhibiting herbicide. To minimize the potential for resistance development and/or to control resistant weed biotypes, use a variety of cultural, mechanical and chemical weed control tactics. Rotate with herbicides having different modes of action (e.g., non-ALS/AHAS materials). Contact your professional crop advisor, local cooperative extension specialist, or Imaflex, Inc. representative for additional information.

## **APPLICATION INSTRUCTIONS**

ADVASEAL® HSM film must be applied as a bedded mulch that it is in continuous contact with the soil. The bed must be uniform with no dish shapes to prevent the mulch from direct contact with the soil because ADVASEAL® HSM releases the active ingredient once the coating on the layer next to the soil gets wet by absorbing water from the soil. The mulch must be applied with a properly adjusted equipment to ensure that the edges of the mulch are secured with a generous amount of soil. However, do not apply more soil than is needed, as this makes the mulch more difficult to remove. Stretch wheels must be adjusted to stretch the mulch edge securely into the anchoring furrow for covering. Mulch applied properly will not blow off the row and requires minimum effort to remove.

ADVASEAL® HSM is packaged in varying lengths from 1600 to 4000 foot per roll. Bedded rows on 6-foot centers require 7,260 feet of row, and rows on 5-foot centers require 8,720 feet of row, to cover an acre of land. The number of rolls needed per acre is calculated by dividing the feet of row by the foot per roll. Therefore, about 3.6 rolls of ADVASEAL® HSM are needed per acre on 6-foot centers, and about 4.4 rolls are needed per acre on 5-foot centers at 2000 foot per roll.

Handler exposure is minimized by an on average 4-inch strip on both edges consisting only of the film, *i.e.*, without the coated interlayers. These strips run the entire length of the tarp on both sides. Applicators handling the tarp using the 4-inch strip would have no exposure to the Halosulfuron-methyl HSM.

## **USE PRECAUTIONS**

- The surface of the film that is on the inside of the roll must be applied to the soil surface.
- When used with a fumigant, observe the most restrictive of the labeling limitations and precautions of both products.

## **USE RESTRICTIONS**

Do not apply more than 43, 560 ft<sup>2</sup> Advaseal ® HSM twice per acre during a 12-month period.

**THIS TABLE LISTS WEEDS CONTROLLED BY ADVASEAL® HSM.**

WHEN USED IN COMBINATION WITH A FUMIGANT, CHECK THE FUMIGANT LABEL TO DETERMINE IF ADDITIONAL WEEDS ARE SUPPRESSED OR CONTROLLED.

C=Controlled; S= Suppressed

WEED SPECIES		PREEMERGENT ACTIVITY
Amaranth, spiny <sup>1</sup>	<i>Amaranth spinosus</i>	C <sup>1</sup>
Cocklebur, common	<i>Xanthium strumarium</i>	C
Com Spurry	<i>Spergula arvensis</i>	C
Dayflower*	<i>Commelina erecta</i>	C
Eclipta*	<i>Eclipta prostrate</i>	C
Flatsedge, Rice*	<i>Cyperus iria</i>	S
Galinsoga	<i>Galinsoga</i>	C
Goosefoot		C
Groundsel	<i>Senecio vulgaris</i>	C
Horseweed/Marestall	<i>Erigeron Canadensis</i>	C
Jimsonweed	<i>Datura stramonium</i>	C
Kochia <sup>1</sup>	<i>Kochia scoparia</i>	C <sup>1</sup>
Ladysthumb	<i>Polygonum persicaria</i>	C
Lambsquarter, Common	<i>Chenoposium album</i>	C
Mustard, Wild	<i>Sinapis arevensis</i>	C
Nutsedge, Yellow	<i>Cyperus exculentus</i>	S
Nutsedge, Purple	<i>Cyperus rotundus</i>	S
Pigweed, Redroot <sup>1</sup>	<i>Amaranthus retroffiexus</i>	C <sup>1</sup>
Pigweed, Smooth <sup>1</sup>	<i>Amaranthus hybridus</i>	C <sup>1</sup>
Purslane	<i>Portulaca oleracea</i>	S
Radish, Wild	<i>Rapharius raphanistrum</i>	C
Ragweed, Common	<i>Ambrosia artemisiifolia</i>	C
Shepherdspurse	<i>Capsell bursa-pastoris (L.) medicus</i>	C
Smartweed, Pennsylvania	<i>Polyfonum pensylvanisum</i>	C
Sunflower	<i>Helianthus annuus</i>	C
Velvetleaf	<i>Abutilan theophrasti</i>	C

\* Except California

<sup>1</sup> Certain biotypes of this weed species are known to be resistant to ALS herbicides.

**CROP APPLICATIONS**

ADVASEAL® HSM may be applied to listed crops as a pre-plant application for suppression of nutsedge and control of listed broad leaf weeds.

Crop	Crop Specific Restrictions
Asparagus	Must not be transplanted into treated beds any sooner than 11 days after ADVASEAL® HSM is installed. Pre-harvest interval (PHI) = 18 days.
Cucumbers, including pickling cucumbers	Must not be seeded or transplanted into the treated beds any sooner than 11 days after installation of ADVASEAL® HSM.
Cantaloupes	Must not be seeded or transplanted into the treated beds any sooner than 11 days after installation of ADVASEAL® HSM.
Honeydew melons	Must not be seeded or transplanted into the treated beds any sooner than 11 days after installation of ADVASEAL® HSM.
Watermelons	Must not be seeded or transplanted into the treated beds any sooner than 11 days after installation of ADVASEAL® HSM. Use only in AL, AR, AZ, CT, DE, FL, GA, IL, IN, KS, KY, LA, MA, MD, ME, MI, MO, MS, NC, NH, NJ, NY, OH, OK, PA, RI, SC, TN, TX, VA, VT, WV, WI.
Summer squash for processing	Must not be seeded or transplanted into the treated beds any sooner than 11 days after installation of ADVASEAL® HSM. Use only in AR, OK and MO.
Pumpkins	Must not be seeded or transplanted into the treated beds any sooner than 11 days after installation of ADVASEAL® HSM.
Winter squash	Must not be seeded or transplanted into the treated beds any sooner than 11 days after installation of ADVASEAL® HSM.
Tomatoes	Must not be seeded or transplanted into the treated beds any sooner than 11 days after installation of ADVASEAL® HSM.

**DIRECTIONS FOR USE:**

- For injection applications, install ADVASEAL HSM immediately after the fumigant is applied to the soil. For drip applications, ADVASEAL HSM must be put in place before the application starts.
- Crop may be seeded or transplanted into this treated area no sooner than 11 days after installation of the plastic mulch film, unless local conditions demonstrate safety at an earlier interval.
- Do not apply more than twice per acre during a twelve month period. Must be applied as a bedded mulch that is in continuous contact with the soil. The bed must be uniform with no dish shapes that prevent the mulch from direct contact with the soil.
- A bedded tarp application of ADVASEAL® HSM with 5-foot row centers results in treatment of 85% of an acre (areas between beds are not treated), which is equivalent to an application of 0.0935 oz. Halosulfuron-methyl/acre. Bedded tarp applications of ADVASEAL® HSM with 6-foot row centers result in treatment of 72% of each acre, which is equivalent to an application of 0.0792 oz. Halosulfuron-methyl/acre. These applications must be taken into consideration when post-emergence applications of Halosulfuron methyl are made with SANDEA herbicide (75% Halosulfuron methyl) because total use of Halosulfuron methyl is restricted to 0.75 oz. /year for asparagus, pumpkins and winter squash, and not more than 1.5 oz. Halosulfuron methyl/year for cucumbers, cantaloupes, honeydews, Crenshaw melons, watermelon, summer squash and tomatoes.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store product rolls under cool, dry conditions (below 120°F). Do not store under moist conditions.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product that cannot be used or chemically reprocessed must be disposed of in a landfill for pesticide disposal or in accordance with applicable Federal, state or local procedures.

**CONTAINER HANDLING:** Offer the plastic mulch film for recycling, if available, or dispose of in a sanitary landfill or by other procedures approved by state or local authorities.

**DISPOSAL AUTHORITIES:** If none of the foregoing procedures is permitted by state and local authorities, then contact your State Pesticide Environmental Control Agency, or your local Hazardous Waste Disposal office, or the Hazardous Waste Representative at the nearest EPA regional Office for guidance.

**FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK OR FIRE), CALL CHEMTREC (800) 424-9300**

## NOTICE OF CONDITIONS OF SALE AND WARRANTY AND LIABILITY LIMITATIONS

Important: Read the entire Directions for Use and Notice of Conditions of Sale and Warranty and Liability Limitations before using this product.

Our directions recommendations for use of this product are based on tests believed to be reliable. However, it is impossible to eliminate all risk associated with the use of this product. Crop injury, inadequate performance, or other unintended consequences may result due to soil or weather conditions, off target movement, presence of other materials, method of use or application, and other factors, all of which are beyond the control of Imaflex, Inc. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer and the User.

Imaflex Inc. warrants that this product conforms to the specifications on the label when used in strict conformance with Directions for Use, subject to the above stated risk limitations. **IMAFLEX INC. MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.**

**TO THE FULLEST EXTENT PERMITTED BY LAW, IMAFLEX INC.'S EXCLUSIVE LIABILITY FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, OR ANY OTHER LEGAL THEORY IS STRICTLY LIMITED TO THE PURCHASE PRICE PAID OR REPLACEMENT OF PRODUCT, AT IMAFLEX INC.'S SOLE DISCRETION.**

\*Halosulfuron-methyl is manufactured by Canyon Group LLC.