

MATERIAL SAFETY DATA SHEET

**1. Product and Company Identification**

**Product:** ADVASEAL® HSM Herbicidal Plastic Fumigation Film  
**EPA Signal Word:** Caution **EPA Registration No.:** 91278-1  
**Active Ingredient:** \*Halosulfuron-methyl (0.00705%) **CAS No.:** 100784-20-1  
**Chemical Name:** Methyl 3-chloro-5-(4,6-dimethoxypyrimidin-2-ylcarbamoylsulfamoyl)-1-methylpyrazole-4-carboxylate (IUPAC)  
**Chemical Class:** Sulfonylurea  
**Recommended use:** For outdoor use only. Herbicide product. Read pamphlet before use.

Formulator: Imaflex USA Inc.  
1200 Unity Street  
Thomasville, North  
Carolina 27360  
(336) 474-1190

**Emergency Phone:** (928) 783-3803  
**For 24-Hour Emergency Assistance (Spill, Leak, Fire, or Exposure), Call CHEMTREC®:**

**Inside the U.S.:** (800) 424-9300  
**Outside the U.S.:** (703) 527-3887  
(888) 478-0798

**For MEDICAL Emergency:**

**2. Hazards Identification**

Classification according to GHS: This product is not classified  
GHS Label elements: No GHS label elements  
Other label elements: herbicide product

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

FIRST AID	
<b>IF ON SKIN OR CLOTHING</b>	-Remove contaminated clothing. -Rinse skin immediately with plenty of water for 15-20 minutes. -Call a poison control center or doctor for treatment advice.

**3. Composition/Information On Ingredients**

INGREDIENT NAME	CAS No.	% (w/w)	GHS classification
Halosulfuron methyl	100784-20-1	0.00705	Aquatic Chronic 1 (M = 10)
Polyethylene	9002-88-4	90	Not Classified

ADVASEAL® HSM is being almost entirely made of polymeric components which are not deemed to be hazardous; only the coating layer on the inside of the product roll contains the herbicide Halosulfuron-methyl.

Only the identities of the active ingredient(s) and any inert ingredients, which in case of a fire can present a *hazard*, are listed. Specific information on all of this product's ingredients can be obtained by the treating medical professional or spill emergency responder for the management of exposures, spills, or safety assessments.

---

## 4. First Aid Measures

---

If on skin or clothing:	Rinse with water for 15 - 20 minutes. Remove contaminated clothing. Seek medical advice.
If inhaled:	Not applicable (YOU CANNOT INHALE THE PRODUCT)
If ingested:	Not applicable
If in eyes:	Rinse with water. Seek medical advice if any slight irritation persists.

Not associated with any known acute or long term toxicity that results in classification.

---

## 5. Fire Fighting Measures

---

### Flash Point

N/A

### Auto Ignition Temperature

645 Degree Fahrenheit.

### Appropriate Extinguishing Media

In case of fire, use water spray (fog), dry chemical, CO<sub>2</sub>, or foam

### Special Fire Fighting Procedures

Firefighters and others that may be exposed to vapors, mists, dusts, or products of combustion should wear full protective clothing and self-contained breathing apparatus. Equipment should be thoroughly cleaned after use.

### Unusual Fire or Explosion Hazards

Thermal decomposition vapors of burning plastic product may be toxic, if insufficient oxygen is present carbon monoxide, acrolein and other toxic aldehydes may be present with thick dense smoke.

---

## 6. Accidental Release Measures

---

### In Case of Spills or Leaks

Spilled product presents a potential slip or trip hazard on solid ground to operators and bystanders and should be cleaned up immediately. Spilled product into lakes, streams, ponds, estuaries, or other surface water presents a potential hazard to aquatic organism and should be removed immediately.

Keep unnecessary people away and isolate hazard area. Wear appropriate personal protective equipment described in Section 8. Refer to Section 13 for disposal information and Section 15 for reportable quantity information.

---

## 7. Handling and Storage

---

### Handling

Avoid contact with eyes or clothing. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing, if in contact with herbicide layer. Then wash thoroughly and put on clean clothing. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by disposing product into surface waters.

### Storage

Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Store under cool, dry conditions below 120°F). Do not store under moist conditions.

---

## 8. Exposure Controls/Personal Protection

---

### Personal Protective Equipment:

Handler exposure is minimized by an 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.

### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

Follow 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.

No OSHA-PEL or ACGIH-TLV values applicable to this product

## 9. Physical and Chemical Properties

---

**Appearance:** Solid polyethylene clear or colored film

**Odor:** Practically odorless

**pH:** 7.59 – 7.68 (1% solution)

**Density:** 52 – 53 lbs/cu ft

Auto Ignition Temperature: 645 Degree Fahrenheit.

**Note:** These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

---

## 10. Stability and Reactivity

---

**Stability:** This product should be stable for at least two years under normal conditions of warehouse storage. Store in a cool, well-ventilated place away from foodstuffs and strong oxidizing agents.

**Hazardous decomposition products:** None known.

**Hazardous polymerization:** Will not occur.

**Incompatibility with other materials:** None.

**Conditions to avoid:** Store under cool, dry conditions (below 120°F). Do not store under moist conditions.

---

## 11. Toxicological Information

---

ADVASEAL HSM is almost entirely made of polymeric components which are TSCA listed in 40 CFR 700. Based on the information of the components and similar products, it is not expected that this product would be hazardous.

Halosulfuron-methyl, the active herbicidal ingredient in Advaseal HSM, is considered to be practically nontoxic orally or by inhalation and no more than slightly toxic dermally. It is slightly irritating to eyes and essentially nonirritating to the skin. Halosulfuron-methyl did not produce skin allergy in the guinea pig.

---

## 12. Ecological Information

---

Advaseal HSM is insoluble in water however Halosulfuron-methyl can be released from the coating, if the product is accidentally spilled into lakes, streams, ponds, estuaries, or other surface water, therefore ecotoxicity data shown is for the active ingredient, Halosulfuron-methyl.

48-hr EC50 Daphnia magna: >107 mg/L (0.013 oz/gal); practically nontoxic.

96-hr LC50 Bluegill sunfish: > 118 mg/L (0.014 oz/gal); practically nontoxic.

96-hr LC50 Rainbow trout: >131 mg/L (0.0159 oz/gal); practically nontoxic.

5-day EC50 Algae (*S. capricornutum*): 0.0053mg/L (0.000000645 oz/gal); very highly toxic.

---

## 13. Disposal Considerations

---

ADVASEAL® HSM film must be applied as bedded mulch in continuous contact with the soil. ADVASEAL® HSM releases the active ingredient once the coating on the layer next to the soil gets wet by absorbing water from the soil.

Unused product, accidental spills and leftovers from application of the product on raised beds that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures.

Offer the plastic mulch film after use in the field and removal from the beds for recycling, if available, or dispose of in a sanitary landfill or by other procedures approved by state or local authorities.

---

## 14. Transport Information

---

### DOT Classification

Not regulated

### International Maritime Organization

Not regulated

### International Civil Aviation Organization

Not regulated

---

## 15. Regulatory Information

---

### SARA Title III Classification

Section 302/304: Not applicable  
Section 311/312: Not applicable  
Section 313 chemical(s): Not applicable

### Proposition 65

Not Applicable

### CERCLA Reportable Quantity (RQ)

None

### RCRA Classification

Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

### TSCA Status

Exempt from TSCA

---

## 16. Other Information

---

### NFPA Hazard Ratings

**Health:** 1  
**Flammability:** 0  
**Reactivity:** 0

0	Least
1	Slight
2	Moderate
3	High
4	Severe

**Notice:** The information and recommendations contained herein are provided in good faith and are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information herein.

### Prepared By:

Imaflex USA Inc.  
(336) 474-1190

Advaseal HSM® is a registered trademark of Imaflex Inc.  
Product is protected by  
U.S. Patent No. 8,383,549; 8,372,418 and; 8,372,417

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