

**Syngenta Crop Protection, LLC**  
**Post Office Box 18300**  
**Greensboro, NC 27419**

**In Case of Emergency, Call**  
**1-800-888-8372**

<b>1. PRODUCT IDENTIFICATION</b>
----------------------------------

Product Name:	<b>PENNANT MAGNUM</b>	Product No.: A9793D
EPA Signal Word:	Caution	
Active Ingredient(%):	s-Metolachlor (83.7%)	CAS No.: 87392-12-9
Chemical Name:	Acetamide, 2-chloro-N-(2-ethyl-6-methylphenyl)-N-(2-methoxy-1-methylethyl)-(S)	
Chemical Class:	Chloroacetanilide Herbicide	
EPA Registration Number(s):	100-950	<b>Section(s) Revised: 14</b>

<b>2. HAZARDS IDENTIFICATION</b>
----------------------------------

Health and Environmental

Harmful if inhaled. Irritating to eyes and skin. May cause an allergic skin reaction. May cause drowsiness or dizziness. May be harmful if swallowed and enters airway.

Hazardous Decomposition Products

Not Available

Physical Properties

Appearance: Golden brown liquid

Odor: Sweet

Unusual Fire, Explosion and Reactivity Hazards

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

<b>3. COMPOSITION/INFORMATION ON INGREDIENTS</b>
--

Material	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen
Petroleum Solvent	Not Established	Not Established	100 mg/m <sup>3</sup> (15-17 ppm) TWA *	No
1,2,4-Trimethylbenzene (< 1%)	Not Established	25 ppm TWA	25 ppm TWA **	No
Naphthalene (< 1%)	10 ppm TWA	10 ppm TWA (skin)	10 ppm TWA **	See "Toxicity", Sec. 11
s-Metolachlor (83.7%)	Not Established	Not Established	10 mg/m <sup>3</sup> TWA ***	No

\* recommended by manufacturer

\*\* recommended by NIOSH

\*\*\* Syngenta Occupational Exposure Limit (OEL)

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

Syngenta Hazard Category: C, S

<b>4. FIRST AID MEASURES</b>
------------------------------

Have the product container, label or Material Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison control center or doctor, or going for treatment.

- Ingestion:** If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
- Eye Contact:** If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.
- Skin Contact:** If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.
- Inhalation:** If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call Syngenta (800-888-8372), a poison control center or doctor for further treatment advice.

#### Notes to Physician

There is no specific antidote if this product is ingested.

Treat symptomatically.

Persons suffering a temporary allergic reaction may respond to treatment with antihistamines or steroid creams and/or systemic steroids.

Contains petroleum distillate - vomiting may cause aspiration pneumonia.

#### Medical Condition Likely to be Aggravated by Exposure

Not Available

## **5. FIRE FIGHTING MEASURES**

### Fire and Explosion

Flash Point (Test Method):	> 200°F (Setaflash)	
Flammable Limits (% in Air):	Lower: Not Applicable	Upper: Not Applicable
Autoignition Temperature:	Not Available	
Flammability:	Not Applicable	

### Unusual Fire, Explosion and Reactivity Hazards

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

### In Case of Fire

Use dry chemical, foam or CO2 extinguishing media. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

## **6. ACCIDENTAL RELEASE MEASURES**

### In Case of Spill or Leak

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

## **7. HANDLING AND STORAGE**

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Ingestion:	Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.
Eye Contact:	Where eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
Skin Contact:	Where contact is likely, wear chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber or Viton), coveralls, socks and chemical-resistant footwear.
Inhalation:	A combination particulate/ organic vapor respirator may be necessary until effective engineering controls are installed to comply with occupational exposure limits. Use a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with an HE prefilter.

Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Golden brown liquid
Odor:	Sweet
Melting Point:	Not Available
Boiling Point:	Not Available
Specific Gravity/Density:	1.1 g/cc typical @ 68°F (20°C)
pH:	5 - 7 (1% solution in H <sub>2</sub> O @ 77°F (25°C))

### Solubility in H<sub>2</sub>O

s-Metolachlor: 0.48 g/l @ 77°F (25°C)

### Vapor Pressure

s-Metolachlor: 2.8 x 10<sup>(-5)</sup> mmHg @ 77°F (25°C)

## 10. STABILITY AND REACTIVITY

Stability:	Stable under normal use and storage conditions.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	Not Available
Materials to Avoid:	Not Available
Hazardous Decomposition Products:	Not Available

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity/Irritation Studies (Finished Product)

Ingestion:	Oral (LD <sub>50</sub> Rat) :	3425 mg/kg body weight
Dermal:	Dermal (LD <sub>50</sub> Rabbit) :	> 2000 mg/kg body weight
Inhalation:	Inhalation (LC <sub>50</sub> Rat) :	> 2.61 mg/l air - 4 hours
Eye Contact:	Moderately Irritating (Rabbit)	
Skin Contact:	Slightly Irritating (Rabbit)	
Skin Sensitization:	Sensitizing (Guinea Pig)	

#### Reproductive/Developmental Effects

s-Metolachlor: None observed.

#### Chronic/Subchronic Toxicity Studies

s-Metolachlor: None observed.

#### Carcinogenicity

s-Metolachlor: Benign liver tumors at high dose levels (female rats).

#### Other Toxicity Information

None

#### Toxicity of Other Components

1,2,4-Trimethylbenzene (< 1%)

Test results reported in Section 11 for the final product take into account any acute hazards related to the 1,2,4-trimethylbenzene in the formulation.

Naphthalene (< 1%)

Test results reported in Section 11 for the final product take into account any acute hazards related to the naphthalene in the formulation.

Chronic overexposure to naphthalene can affect the liver, kidney, respiratory tract and blood.

Carcinogen Status:

NTP: Anticipated Carcinogen

IARC: Group 2B Possible Human Carcinogen

Petroleum Solvent

May cause irritation to the eyes, skin and respiratory system. Excessive inhalation causes headache, dizziness, nausea and loss of motor skills.

#### Target Organs

##### Active Ingredients

s-Metolachlor: Liver

##### Inert Ingredients

1,2,4-Trimethylbenzene: Not Applicable

Naphthalene: Liver, kidney, respiratory tract, blood

Petroleum Solvent: Eye, skin, respiratory system, central nervous system

## **12. ECOLOGICAL INFORMATION**

#### Ecotoxicity Effects

s-Metolachlor:

Fish (Rainbow Trout) 96-hour LC50 11.9 ppm

Green Algae 5-day EC50 0.008 ppm

Bird (Bobwhite Quail) LD50 Oral > 2510 mg/kg

Invertebrate (Water Flea) 48-hour EC50 26 ppm

#### Environmental Fate

s-Metolachlor:

The information presented here is for the active ingredient, s-metolachlor.

Low bioaccumulation potential. Not persistent in soil. Stable in water. Sinks in water (after 24 h).

## **13. DISPOSAL CONSIDERATIONS**

### Disposal

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable

Listed Waste: Not Applicable

## **14. TRANSPORT INFORMATION**

### DOT Classification

Ground Transport - NAFTA

Packages < 1700 gal. - Not regulated.

Packages > 1700 gal.

Proper Shipping Name: RQ Other Regulated Substances, Liquid, N.O.S. (Naphthalene)

Hazard Class: Class 9

Identification Number: NA 3082

Packing Group: PG III

### Comments

Water Transport - International

Proper Shipping Name:

< 1700 gal.

Environmentally Hazardous Substance, Liquid, N.O.S. (s-Metolachlor), Marine Pollutant

> 1700 gal.

RQ Environmentally Hazardous Substance, Liquid, N.O.S. (s-Metolachlor, Naphthalene), Marine Pollutant

Hazard Class: Class 9

Identification Number: UN 3082

Packing Group: PG III

Air Transport

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (s-Metolachlor)

Hazard Class: Class 9

Identification Number: UN 3082

Packing Group: PG III

## **15. REGULATORY INFORMATION**

### EPCRA SARA Title III Classification

Section 311/312 Hazard Classes: Acute Health Hazard

Section 313 Toxic Chemicals: 1,2,4-Trimethylbenzene (< 1%) (CAS No. 95-63-6)

Naphthalene (< 1%) (CAS No. 91-20-3)

### California Proposition 65

Not Applicable

### CERCLA/SARA 304 Reportable Quantity (RQ)

Report product spills > 2,500 gal. (based on naphthalene [RQ = 100 lbs.] content in the formulation)

### RCRA Hazardous Waste Classification (40 CFR 261)

Not Applicable

### TSCA Status

Exempt from TSCA, subject to FIFRA

## **16. OTHER INFORMATION**

NFPA Hazard Ratings

Health: 2  
Flammability: 1  
Instability: 0

HMIS Hazard Ratings

Health: 2  
Flammability: 1  
Reactivity: 0

0	Minimal
1	Slight
2	Moderate
3	Serious
4	Extreme

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date: 3/30/1998

Revision Date: 7/13/2010

Replaces: 6/11/2010

The information and recommendations contained herein 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 contained herein.

End of MSDS