

## Material Safety Data Sheet

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Suite 330  
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In Case of Emergency, Call

**1-800-424-9300**

### 1. PRODUCT IDENTIFICATION

Product Name: **BRAWL** Product No: A9793B

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): 100-816-55467 Section(s) Revised: 1

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Material	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen
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 NIOSH

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

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

### 3. HAZARDS IDENTIFICATION

#### Symptoms of Acute Exposure

Causes eye, skin and respiratory passage irritation. Allergic skin reactions are possible. Exposure to high vapor levels may cause headache, dizziness, numbness, nausea, incoordination, or other central nervous system effects.

#### Hazardous Decomposition Products

Can decompose at high temperatures forming toxic gases.

#### 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.

#### **4. FIRST AID MEASURES**

Have the product container, label or Material Safety Data Sheet with you when calling a poison control center or doctor, or going for treatment

**Ingestion:** If swallowed: Call 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 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 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 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 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**

None known.

#### **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 (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.

**Inhalation:** A respirator is not normally required when handling this substance. Use effective engineering controls to comply with occupational exposure limits.

In case of emergency spills, use a NIOSH approved respirator with any R, P or HE filter.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Golden brown liquid
Odor:	Sweet
Melting Point:	Not Applicable
Boiling Point:	Not Available
Specific Gravity/Density:	1.09 g/cm <sup>3</sup> @ 68°F (20°C)
pH:	5.5 (1% solution in H <sub>2</sub> O @ 77°F (25°C))
<u>Solubility in H<sub>2</sub>O</u> s-Metolachlor:	0.48 g/l @ 77°F (25°C)
<u>Vapor Pressure</u> 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:	None known.
Materials to Avoid:	None known
Hazardous Decomposition Products:	Can decompose at high temperatures forming toxic gases

## 11. TOXICOLOGICAL INFORMATION

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

Ingestion:	Slightly Toxic Oral (LD50 Rat) :	3,425 mg/kg body weight
Dermal:	Slightly Toxic Dermal (LD50 Rabbit)	> 2,000 mg/kg body weight
Inhalation:	<u>Practically Non-Toxic</u> Inhalation (LC50 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%)

Inhalation of 1,2,4-trimethylbenzene at high concentrations can cause central nervous system depression, respiratory tract irritation, asphyxiation, cardiac stress and coma. Effects of chronic exposure to this solvent can include blood disorders (anemia, leukopenia) and kidney or liver damage.

#### Naphthalene (<= 1%)

Exposure to naphthalene can cause cataracts, liver damage, kidney failure, respiratory failure, hematuria, anemia, damage to red blood cells, leukocytosis, or coma.

Carcinogen Status:

NTP: Anticipated Carcinogen

IARC: Group 2B Possible Human Carcinogen

### Target Organs

#### Active Ingredients

s-Metolachlor: Liver

#### Inert Ingredients

1,2,4-Trimethylbenzene: CNS, liver, kidney, blood, respiratory tract, skin, eye

Naphthalene: Eye, liver, kidney, respiratory tract, blood, CNS

## 12. ECOLOGICAL INFORMATION

### Summary of Effects

s-Metolachlor:

Slightly to moderately toxic to fish. Slightly toxic to invertebrates. Practically non-toxic to birds and bees.

### Eco-Acute Toxicity

s-Metolachlor:

Bees LC50/EC50 > 200 ug/bee  
Invertebrates (Water Flea) LC50/EC50 26 ppm  
Fish (Trout) LC50/EC50 12 ppm  
Fish (Bluegill) LC50/EC50 3.16 ppm  
Birds (8-day dietary - Bobwhite Quail) LC50/EC50 > 5,620 ppm  
Birds (8-day dietary - Mallard Duck) LC50/EC50 > 5,620 ppm

### Eco-Chronic Toxicity

s-Metolachlor:

Not Available

### 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:

Under certain circumstances, discarded product may exhibit TCLP hazardous characteristics. A hazardous waste determination should be done on a case by case basis

### 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 or Division: Class 9  
Identification Number: NA 3082  
Packing Group: PG III

Air Transport – NAFTA  
Packages < 1700 gal. - Not regulated.

### B/L Freight Classification

Herbicides, NOI (NMC Class 60)

**Comments**

Water Transport – International

Proper Shipping Name:

< 1700 gal.

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

≥ 1700 gal.

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

Hazard Class or Division: Class 9

Identification Number: UN 3082

Packing Group: PG III

MDG EMS #: F-A, S-F

Air Transport – International

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

Hazard Class or Division: Class 9

Identification Number: UN 3082

Packing Group: PG III

Packing Auth.: 914 Special Provision A97

Note: Max. inner package: plastic - 5 liters, metal - 10 liters

Max. single package: 450 liters

**15. REGULATORY INFORMATION****EPCRA SARA Title III Classification**

Section 311/312/ Hazard Classes:      Acute Health Hazard  
Chronic 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 302 Reportable Quantity (RQ)**

Report product spills > 1,700 gal. (based on naphthalene [RQ = 100 lbs.] content in the formulation)

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

Under certain circumstances, discarded product may exhibit TCLP hazardous characteristics. A hazardous waste determination should be done on a case by case basis

**TSCA Status**

Exempt from TSCA, subject to FIFRA

**16. OTHER INFORMATION****NFPA Hazard Ratings**

Health:            2  
Flammability:    1  
Instability:       0

**HMIS Hazards 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: **1-770-343-8509**

Original Issued Date: 12/13/2004

Revision Date: 01/07/2005

Replaces:

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

Product Name: **BRAWL**