

# Material Safety Data Sheet

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In Case of Emergency, Call

**1-800-424-9300**

## 1. PRODUCT IDENTIFICATION

Product Name: **BRAWL II ATZ** Product No: A9560A

EPA Signal Word: Caution

Active Ingredient (%): Atrazine (33.0%) CAS No.: 1912-24-9

Chemical Name: 2-chloro-4-ethylamino-6-isopropylamino-s-triazine

Chemical Class: Triazine Herbicide

Active Ingredient (%): s-Metolachlor (26.1%) 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): 100-817 Section(s) Revised: 2, 11

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Material</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>Other</u>	<u>NTP/IARC/OSHA Carcinogen</u>
Ethylene Glycol (<= 6%)	Not Established	100 mg/m <sup>3</sup> (ceiling)	Not Established	No
		[aerosol		
Benoxacor	Not Established	Not Established	1 mg/m <sup>3</sup> TWA***	No
Atrazine (33.0%)	Not Established	5 mg/m <sup>3</sup> TWA	5 mg/m <sup>3</sup> TWA**	IARC Group 3
s-Metolachlor (26.1%)	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 mild eye and skin irritation.

#### **Hazardous Decomposition Products**

Can decompose at high temperatures forming toxic gases.

#### **Physical Properties**

Appearance: White fluid paste

Odor: Latex paint

#### **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. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so after calling 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.

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

None known.

### 5. FIRE FIGHTING MEASURES

#### **Fire and Explosion**

Flash Point (Test Method): > 212°F (Abel-Pensky CC)

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.

**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 N, R, P or HE filte

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White fluid paste
Odor:	Latex paint
Melting Point:	Not Applicable
Boiling Point:	216°F
Specific Gravity/Density:	1.11 g/cm <sup>3</sup> @ 77°F (25°C)
pH:	6.9 (1% solution in H <sub>2</sub> O @ 77°F (25°C))

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

Atrazine :	33 mg/l @ 68°F (20°C)
s-Metolachlor:	0.48 g/l @ 77°F (25°C)

### Vapor Pressure

Atrazine :	2.9 x 10 <sup>(-7)</sup> mmHg @ 68°F (20°C)
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:	<u>Slightly Toxic</u> Oral (LD50 Rat)	3,271 mg/kg body weight
Dermal:	<u>Slightly Toxic</u> Dermal (LD50 Rabbit) :	> 2,020 mg/kg body weight
Inhalation:	<u>Slightly Toxic</u> Inhalation (LC50 Rat) :	> 1.6 mg/l air - 4 hours
Eye Contact:	Mildly Irritating (Rabbit)	
Skin Contact:	Slightly Irritating (Rabbit)	
Skin Sensitization:	Not a Sensitizer (Guinea Pig)	

### **Reproductive/Developmental Effects**

Atrazine : None observed.  
s-Metolachlor: None observed.

### **Chronic/Subchronic Toxicity Studies**

Atrazine : Cardiotoxicity in long term study with high doses (dogs).  
s-Metolachlor: None observed.

### **Carcinogenicity**

Atrazine : Mammary tumors (fe male Sprague-Dawley rats), sex and strain specific.  
None observed (male Sprague-Dawley rats, F-344 rats or mice)  
s-Metolachlor: Benign liver tumors at high dose levels (female rats).

### **Other Toxicity Information**

None

### **Toxicity of Other Components**

#### **Benoxacor**

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

#### **Ethylene Glycol (<= 6%)**

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

### **Target Organs**

#### **Active Ingredients**

Atrazine : Heart  
s-Metolachlor: Liver

#### **Inert Ingredients**

Benoxacor: Not Applicable  
Ethylene Glycol: Not Applicable

## **12. ECOLOGICAL INFORMATION**

### **Summary of Effects**

Atrazine : Slightly toxic to fish and invertebrates. Practically non-toxic to birds and bees.  
s-Metolachlor: Slightly to moderately toxic to fish. Slightly toxic to invertebrates. Practically non-toxic to birds and bees

### **Eco-Acute Toxicity**

Atrazine : Bees LC50/EC50 > 100 ug/bee  
Invertebrates (Water Flea) LC50/EC50 > 31 ppm  
Fish (Trout) LC50/EC50 9.9 ppm  
Fish (Bluegill) LC50/EC50 54.5 ppm  
Birds (8-day dietary - Bobwhite Quail) LC50/EC50 > 5,000 ppm  
Birds (8-day dietary - Mallard Duck) LC50/EC50 > 5,000 ppm

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**

Atrazine : Fish (Fathead minnow) Early Life Stage MATC >0.25 and <0.46 mg A.I./L  
Mallard Reproduction NOEC 225 ppm a.i.  
Bobwhite Reproduction NOEC 225 ppm a.i.  
Invertebrate (Ceriodaphnia dubia) Life Cycle NOEL 2.5 ppm

s-Metolachlor: Not Available

### **Environmental Fate**

Atrazine : The information presented here is for the active ingredient, atrazine. Low bioaccumulation potential. Not persistent in soil. Stable in water. Highly mobile in soil. Will leach. Sinks in water (after 24 h).

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  
Road Transport - Not regulated.

Rail Car Shipments

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

Hazard Class or Division: Class 9

Identification Number: NA 3082

Packing Group: PG III

Air Transport – NAFTA

Not regulated.

### **B/L Freight Classification**

Herbicides, NOI (NMC Class 60)

### **Comments**

Water Transport – International

< 13,500 gal.

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

Hazard Class or Division: Class 9

Identification Number: UN 3082

Packing Group: PG III

IMDG EMS #: F-A, S-F

Air Transport – International

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

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

Section 313 Toxic Chemicals: Atrazine (33.0%) (CAS No. 1912-24-9)  
Ethylene Glycol (<= 6%) (CAS No. 107-21-1)

### California Proposition 65

Not Applicable

### CERCLA/SARA 302 Reportable Quantity (RQ)

Report product spills > 13,500 gal. (based on ethylene glycol [RQ = 5,000 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: 1  
Flammability: 1  
Instability: 0

### HMIS Hazards Ratings

Health: 1  
Flammability: 1  
Reactivity: 0

0	Minimal
1	Slight
2	Moderate
3	Serious

For non-emergency questions about this product call: **1-770-343-8509**

Original Issued Date: 06/10/1996

Revision Date: 01/31/2005

Replaces: 01/17/2005

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.

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