MATERIAL SAFETY DATA SHEET

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In Case of Emergency
Call 1-800-424-9300 (CHEMTREC, 24 hours)
OR (877) 424-7452

1. PRODUCT IDENTIFICATION

Product Name: **Charger MAX™ ATZ**

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): **1381-199** **Section(s) Revised:**

2. COMPOSITION/INFORMATION ON INGREDIENTS

Material	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen
EthyleneGlycol (<=6%)	**Not Established**	**100 mg/m^3 (ceiling) [aerosol]**	**Not Established**	**No**
Benoxacor	**Not Established**	**Not Established**	**1 mg/m^3 TWA*** **	**No**
Atrazine (33.3%)	**Not Established**	**5 mg/m^3 TWA**	**5mg/m^3 TWA****	**IARC Group 3**
s-Metolachlor (26.1%)	**Not Established**	**Not Established**	**10 mg/m^3 TWA*** **	**No**

** recommended by NIOSH

***Occupational Exposure Limit (OEL)

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications. Hazard Category: C, S

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, PACKAGING AND USE 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 filter.

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^3 @ 77°F (25°C)
pH:	6.9 (1% solution in H2O @ 77°F (25°C))

Solubility in H2O

Atrazine :	33 mg/1 @ 68°F (20°C)
s-Metolachlor:	0.48 g/1 @ 77°F (25°C)

Vapor Pressure

Atrazine :	2.9 x 10(-7) mmHg @ 68°F (20°C)
s-Metolachlor:	2.8 x 10(-5) 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) :	3,271 mg/kg body weight
Dermal:	Slightly Toxic	
	Dermal (LD50 Rabbit) :	> 2,020 mg/kg body weight
Inhalation:	SlightlyToxic	
	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 (female 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

Toxicitv of Other Components

Benoxacor

Test results reported in Section 11 for the final product take into account any acute hazards related to the 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. (Etylene Glycol)
Hazard Class or Division: Class 9
Identification Number: NA 3082
Packing Group: PGIII

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
Indentification 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 (33.3%) (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		HMIS Hazard Ratings			
Health:	1	Health:	1	0	Minimal
Flammability:	1	Flammability:	1	1	Slight
Instability:	0	Reactivity:	0	2	Moderate
				3	Serious
				4	Extreme

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