

**1. PRODUCT IDENTIFICATION:
PRODUCT USE:**

EHC[®]-M
For the remediation of contaminated groundwater only. Not for use with potable drinking water.

MANUFACTURER:

Adventus Americas Inc.
2871 W. Forest Rd, Suite 2
Freeport, IL
61032

EMERGENCY PHONE:

Office Hours: 815-235-3503
After Hours: 630-309-1175

TRANSPORTATION OF DANGEROUS GOOD CLASSIFICATION:

Not Regulated

WHMIS CLASSIFICATION:

Not Regulated

CONTAINMENT HAZARD:

Any vessel that contains wet EHC or EHC and water must be vented due to potential pressure build up from fermentation gasses.

2. INGREDIENTS

CHEMICAL NAME:	CAS#	TLV (mg/m3)	LD low (mg/Kg)	% in Product
Organic Amendment	N/D	N/E	N/E	25 - 35
Iron	7439-89-6	5 (as iron oxide fume)	N/E	25 - 35
Sulphur	7704-34-9	N/E	5,050 (rats)	25 - 35

3. PHYSICAL DATA

Physical state.....	Solid	Melting point.....	1371-1480°F
Odour threshold.....	N/A	Boiling point.....	3000°C
Density.....	1.03 Kg/L	Vapour pressure (mm Hg).....	1 @ 1787°C
pH.....	5.6	Vapour density (air=1).....	N/A
Solubility in water.....	Insoluble	Evaporation rate.....	N/A
Coeff. of water/oil.....	N/A		
Appearance & odour.....	Tan/Brown Powder, Odourless		

4. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Deg. C):	207		
FLAMMABLE LIMITS IN AIR % BY VOLUME:		LOWER	UPPER
AUTO IGNITION TEMP (Deg. C):		3.3	46.0
		248-266	

EXTINGUISHING MEDIA: Water Fog, spray or regular foam, do not use direct water stream.

SPECIAL PROCEDURES:

Firefighters should wear SCBA and protective clothing. Do not use direct stream which can result in dust cloud and create an explosion hazard. Evacuate non-essential personnel from the fire area. If large fire, isolate for ½ mile in each direction. Prevent human exposure to smoke fumes or products of combustion (sulphur oxide gases). Firemen exposed to contaminated smoke should be immediately relieved and should seek immediate medical attention. Symptoms of exposure to toxic gas should not be mistaken for heat exhaustion or smoke inhalation. These are extremely irritating to the respiratory tract and may cause breathing difficulty and pulmonary edema. Symptoms may be delayed several hours depending on exposure.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Dust can present fire and explosion hazards when exposed to fire, chemical reaction, or contact with powerful oxidizers.

5. REACTIVITY DATA

STABILITY (NORMAL COND.):

Stable: X **Unstable:**

CONDITIONS TO AVOID:

Contact with powerful oxidizers such as strong acids.

INCOMPATIBILITY (Materials to Avoid):

Powerful oxidizers such as strong acids.

HAZARDOUS DECOMPOSITION PRODUCTS:

Hydrogen, Carbon monoxide, Carbon Dioxide, Sulphur oxides.

6. TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY:

Inhalation
Ingestion (not likely)

HEALTH HAZARDS:

Acute overexposure may cause eye, nose, mouth, skin and respiratory irritation.

Carcinogenicity: No Information Available

Signs and Symptoms of Exposure: Nose or throat irritation, chest discomfort, asthma, difficulty breathing, nausea, vomiting, stinging eye irritation, skin irritation, hives.

Medical Conditions Generally

Aggravated by Exposure: People with known allergies to sulfide containing drugs may also have allergic reactions to elemental sulphur.

EMERGENCY FIRST AID:

Skin Contact: No adverse effects. Skin irritation may be aggravated in persons with existing skin lesions.
FIRST AID: Wash skin with plenty of mild soap and water

Eye Contact: Dust is an eye irritant. Avoid contact with eyes, especially contact wearers. Wear safety glasses.

FIRST AID: Immediately flush eyes with plenty of water for a minimum of 15 minutes. Hold upper and lower lids apart to ensure complete rinsing of the entire eye surface and lids. Do not use boric acid to rinse with: sulphur is an acid irritant. **FOR SEVERE EXPOSURE, GET MEDICAL ATTENTION.**

Inhalation: Prolonged inhalation may cause irritation of the respiratory tract. Breathing of dust may aggravate asthma and other pulmonary diseases. Individuals with known allergies to sulfide drugs may also have allergic reaction to elemental sulphur. Maintain adequate ventilation in areas where dust is present.

FIRST AID: Move patient to fresh air. Watch for signs of allergic reaction. Use a bronchodilator inhaler if directed by asthma patient. Keep victim warm and quiet. If not breathing clear airway and start mouth to mouth resuscitation. **GET MEDICAL ATTENTION IMMEDIATELY**

Ingestion: Do not eat sulphur. Ingested sulphur is converted to sulfides in the gastrointestinal tract and has caused irritation of the GI tract and renal injury. Individuals with known allergies to sulfide drugs may also have allergic reaction to elemental sulphur. Swallowing large amounts may cause nausea and vomiting.

FIRST AID: For large amounts, if patient is conscious give two or more glasses of water to drink. Induce vomiting. Do not give anything by mouth to an unconscious or convulsing patient. **GET MEDICAL ATTENTION IMMEDIATELY.**

7. PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT:

Eye Protection: X **Gloves:** X **Clothing:** X

RESPIRATORY PROTECTION:

Use dust mask or NIOSH approved dust respirator in severe conditions.
Use good housekeeping practices to keep dust to a minimum.

VENTILATION REQUIREMENTS:

Maintain adequate ventilation and wear respirator or dust mask in dusty conditions.

SPILL AND LEAK PROCEDURES:

Sweep up and return to container. Use Aluminum shovel and natural fiber broom to prevent sparks.
Wash skin after handling and before eating. Wash spill site after clean-up is complete.

WASTE DISPOSAL:

Follow Federal, State and Local guidelines. Dispose at an approved facility.

HANDLING PROCEDURES:

Wear safety glasses for normal use. Avoid generating excessive dust, wear dust mask or respirator in severe conditions.

STORAGE REQUIREMENTS:

Do not store near oxidizers or acids. Store in a cool dry well ventilated place. Keep container closed and store away from sources of heat, ignition, flame and sparks.

Any vessel that contains wet EHC or EHC and water must be vented due to potential pressure build up from fermentation gasses.

9. REGULATORY INFORMATION

Environmental:

No Canadian Federal Standards

WHMIS:

This product is a WHMIS controlled substance. Class B: Flammable and Combustible material.

Division 4: Flammable solid

TDG:

This material is regulated under TDG as class 4.1, Flammable solid due to the occurrence of sulphur as a principle ingredient. TDG regulations do not apply if shipped in quantities of less than 400 kg/package.

Shipping Name: Sulphur, 4.1, PG III, UN No. 1350.

10. PREPARATION INFORMATION

Prepared By: Envirometal Technologies Inc.
1345 Fewster Drive
Mississauga, Ontario
L4W 2A5

Date Prep./Rev.: 12/4/09
Print Date: 12/4/09
Phone: 905-273-5374
Fax: 905-273-4367

Definitions:

N/D - No Data

N/A - Not Applicable

N/E - Not Established

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