

**SAFETY DATA SHEET**  
**According to OSHA Hazard Communication Standard 29 CFR 1910.1200 (GHS)**

**EARTH SCIENCE LABORATORIES, INC.**

903 N 47th Street, Suite 105  
Rogers, AR 72756  
earthsciencelabs.com

**Emergency Phone Number:** 1-800-535-5053 (Infotrac)  
**Information Phone Number:** 1-800-962-1492

**Material Name:** *ESL Zinc Manganese*™

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**Issue Date:** 01/2019  
**Revision Date:** 01/2020

**Section 1 –IDENTIFICATION**

**Product Name:** ESL Zinc Manganese™

**Manufactured by:** Earth Science Laboratories, Inc.  
903 N 47<sup>th</sup> St., Suite 105  
Rogers, AR 72756

**Section 2 –HAZARDS IDENTIFICATION**

**NFPA**  
**HMIS III:**

Health = 2, Fire = 0, Reactivity = 1  
H2///F0/PH1

**GHS Signal Word:**

Warning

**GHS Hazard Pictograms:**



**GHS Classifications:**

Physical, Corrosive to Metals, 1  
Health, Acute Toxicity, 4 Oral  
Health, Skin corrosion/irritation. Avoid contact with skin, 2  
Health, Causes serious eye irritation/eye irritation, 2  
Environmental, Hazards to the aquatic environment – no data available

**GHS Phrases:**

H290 – May be corrosive to metal  
H302 – Harmful if swallowed  
H315 – Causes skin irritation  
H319 – Causes serious eye irritation

**GHS Precautionary Statements:**

P102 – Keep out of reach of children.  
 P233 – Keep container tightly closed.  
 P262 – Do not get in eyes, on skin or clothing.  
 P264 – Wash skin thoroughly after handling.  
 P270 – Do not eat, drink or smoke when handling this product.  
 P280 – Wear protective gloves/protective clothing/eye protection/face protection.  
 P281 – Use personal protective equipment as required.  
 P301+310 – IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
 P301+330+331 – IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.  
 P303+361+353 – IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 P304+340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 P305+351+338 – IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.  
 P403+233 – Store in a well ventilated place. Keep container tightly closed  
 P501 – Dispose of contents /container according to State and Federal laws.

**Section 3 – COMPOSITION/INFORMATION ON INGREDIENT**

Components	CAS#	%
Manganese (II) sulfate monohydrate	10034-96-5	3.00 % (as Mn)
Sulfur	7704-34-9	6.6 % as Sulfate (SO <sub>4</sub> )
Zinc Sulfate Monohydrate	7446-19-7	7.0 % as Zinc (Zn)
Inerts		71.6%

\*Per O.S.H.A. definition also known as 50 Fed. Reg. 48750

**Section 4 – FIRST AID MEASURES**

**If in Eyes:** Hold eye open and rinse slowly and gently with water for 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for advice.

**If on Skin or Clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of soap and water for 15 to 20 minutes. Call a poison control center or doctor for treatment.

**If Swallowed:** Call a poison control center or doctor immediately for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything to an unconscious person.

**Note to Physician:** Probable mucosal damage may contraindicate the use of gastric lavage.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact INFOTRAC 1-800-535-5053 for emergency treatment.

**Section 5 – FIRE FIGHTING MEASURES**

**Flash Point:** N/E

**UFL:** N/E

**LFL:** N/E

**Hazardous Combustion Products:** May react with high carbon metals to produce hydrogen gas, which can form an explosive mixture.

**Fire Fighting Equipment/Instructions:** Firefighters must wear MSHA/NIOSH approved positive pressure breathing apparatus (SCBA) with full face mask and full protective equipment.

**NFPA Ratings:**

**Fire:** 0

**Health:** 2

**Reactivity:** 1

**Other:** X

**HMIS III Ratings:**

**Fire:** 0

**Health:** 2

**Reactivity:** 1

**Personal Protection:** X

**Section 6 – ACCIDENTAL RELEASE MEASURES**

**Containment Procedures:** Flush with water into retaining area or container. Caution should be exercised regarding personal safety and exposure to released product.

**Clean-Up Procedures:** Neutralize solution with bicarbonate of soda.

**Evacuation Procedures:** Keep unnecessary people away; isolate hazard area and deny entry.

**Special Instructions:** Notify local authorities and the National Response Center, if required.

### Section 7 – HANDLING AND STORAGE

**Application and Handling Equipment:** Application, handling or storage equipment MUST consist of fiberglass, PVC, polypropylene, viton, corrosion resistant plastics or stainless steel. Never use mild steel, nylon, brass or copper around product. Always rinse and clean equipment thoroughly each night with plenty of fresh, clean water.

**Storage:** Store in a safe place away from pets and keep out of the reach of children. Store away from excessive heat. Product will freeze. Always store product above 40 degrees F (Do Not Freeze). Freezing may cause product separation. Always keep container closed. Store product in its original container only. Keep away from galvanized pipe, and any nylon storage or handling equipment.

### Section 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Personal Protective Equipment (PPE)

Mixers, loaders, applicators and other handlers must wear the following: long-sleeved shirt, long pants, shoes plus socks, chemical-resistant gloves made of any water proof material (Chemical Resistance Category A), and protective eyewear.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent material that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

### Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Clear

**Physical State:** Liquid

**pH:** 0.2

**Vapor Pressure:** N/A

**Boiling Point:** N/A

**Melting Point:** N/A

**Odor:** Minimal odor

**Vapor Density (Air=1):** 1.0

**Evaporation Rate:** N/A

**Solubility in Water:** Complete

**Specific Gravity (H<sub>2</sub>O=1):** 1.34 +/- 0.05

### Section 10 – STABILITY AND REACTIVITY

**Chemical Stability:** Stable.

**Conditions to Avoid:** Avoid mixing with strong bases and strong reducing agents.

**Incompatibility:** Incompatible with strong bases and strong reducing agents.

**Hazardous Decomposition Products:** Sulfur dioxide and sulfur trioxide may be produced with decomposition.

**Hazardous Polymerization:** Will not occur.

### Section 11 - TOXICOLOGICAL INFORMATION

**Acute Toxicity / Chronic Toxicity:** Continued overexposure to this solution may cause systemic toxicity.

**Carcinogenicity:** N/A

**Signs and Symptoms of Exposure:** Overexposure may cause the following specific symptoms, depending on the concentration and duration of exposure: vomiting, shallow respiration and lung function changes.

### Section 12 - ECOLOGICAL INFORMATION

No Data/information found.

### Section 13 – DISPOSAL CONSIDERATIONS

Improper disposal of excess product mixture or rinsate is a violation of federal law. Dispose in a safe manner in accordance with local/national regulations. Dispose of container to comply with local, state and federal regulations.

In the event of spill, neutralize with limestone or baking soda before disposal. May deteriorate concrete.

## Section 14 – TRANSPORT INFORMATION

### DOT Information

**Proper Shipping Name:** Corrosive liquid, acidic, inorganic, n.o.s., (contains sulfuric acid)

**Hazard Class:** 8

**UN/NA #:** UN3264

**Packing Group:** III

- Packages that contain more than 5.1 US gallons are **RQ** (reportable quantity)
- Packages that contain less than 4.0 liters could be **ORM-D**
- The proper shipping information is the responsibility of the shipper and this information is only guidelines.

## Section 15 - REGULATORY INFORMATION

**Caution. Keep Out of Reach of Children.** This product is not a pesticide.

### US State

#### State Right to Know:

**CAS# 10034-96-5** can be found on the following state right to know lists: **California**, (listed as Manganese compounds, n.o.s.), **New Jersey**, (listed as Manganese compounds, n.o.s.),

**Pennsylvania**, (listed as Manganese compounds, n.o.s.), **Minnesota**, (listed as Manganese compounds, n.o.s.).

**California Regulations:** none

**CAS# 7446-19-7** can be found on the following state right to know lists: **California**, (listed as Zinc compounds, n.o.s.), **New Jersey**, (listed as Zinc compounds, n.o.s.),

**Pennsylvania**, (listed as Zinc compounds, n.o.s.), **Minnesota**, (listed as Zinc compounds, n.o.s.).

**California Regulations:** none

## Section 16 - OTHER INFORMATION

**Date of Last Revision:** Janu 2020

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