Material Safety Data Sheet Earthbind™ Products

Quick Identifier: Modified Biopolymer Emulsion

Address: 2606 N. Newark St. Portland, Oregon 97217

Manufacturers Name:EnviRoad LLCOther Information Calls:800-536-2650

Identity - Section I

Trade Name and Synonyms: Earthbind™ 100, Earthbind™ Stabilizer, Earthbind™ Water Truck, Earthbind™ Prime, Earthbind™ HydroTac

CAS Number: Mixture
Chemical Name: NA

NFPA Hazardous Identification

Health: 1

• Fire: 0

· Reactivity: 0

0 - Least; 1 - Slight; 2 - Moderate; 3 - High; 4 - Extreme

Composition Information on Ingredients - Section II

| Ingredients | CAS | % | OSHA PEL | ACGIH TLV |
|-------------|-------------|---------|----------|-----------|
| Bitumen | Proprietary | 40-60 | NE | NE |
| Stabilizer | Proprietary | 5-30 | NE | NE |
| Emulsifier | Proprietary | < 6.0 | NE | NE |
| Water | 7732-18-5 | Balance | NE | NE |

Additional Comments: Though further detail on contents may be confidential, all pertinent hazards are addressed in this MSDS.

Physical & Chemical Characteristics - Section III

Boiling Point >100 C
Vapor Pressure (mm Hg) NA
Percent Volatile by Volume NA

Solubility in Water Complete

Specific Gravity (H20=1.00)

1.01 to 1.05

Vapor Density (air@1) NA

Evaporation Rate (H20 = 1) NA

Reactivity in Water None

Viscosity @ 77F SFS 20-450

Appearance and Odor Dark Brown Liquid; Bitumen and molasses odor

Additional Comments Material is a bitumen/water emulsion and will not combust until water is driven off.

Fire And Explosion Hazard Data - Section IV

Flash Point

NA

Flammable Limits in Air % bv (bitumen/water emulsion)

Volume Extinguisher

Dry Chemical, CO2, Halon, Water Spray, or standard foam

Media
Fire Fighting
Procedures

Move containers from fire area if possible. Cool fire-exposed containers with water from side until well after fire is out. Stay away from storage tank end for massive fire in storage area. Use unmanned hose holder or monitor. Use flooding amounts of water as a fog, as solid streams may be ineffective. Withdraw immediately in case of rising sound from venting safety device or any discoloration of storage vessel due to fire. Extinguish only if flow can be stopped. Water or foam may cause frothing. Avoid breathing

toxic vapors and keep upwind.

Additional Comments

Inhalation

Material is a bitumen/water emulsion and will not ignite until water is driven off.

Reactivity Data - Section V

Stability/Conditions to Avoid Material is stable under normal temperature and pressure. Do not expose to prolonged heating above 100C.

Incompatibility/Materials to Avoid None
Hazardous Polymerization/Conditions to Avoid None

Hazardous Byproducts of Decomposition Thermal decomposition may release hazardous gases

Health Hazard Data - Section VI

Route of Entry

Legend: A: Health Effect; B: Personal Protection; C: Emergency First Aid Procedures

Route of Entry Legenta, A. Health Effect, B. Personal Protection, C. Effergency First Aid Protections

- B. Provide exhaust ventilation system to meet published exposure limits.

 C. Remove victim from exposure to fresh air immediately. If breathing has stopped, give artificial respiration. Keep victim warm and at rest. Treat
- C. Remove victim from exposure to fresh air immediately. If breathing has stopped, give artificial respiration. Keep victim warm and at rest. Treat symptomatically and supportively. Administration of oxygen should be performed by qualified personnel. Get medical attention immediately.
- Skin

 A. Direct contact with hot fumes may cause slight skin irritation. Repeated or prolonged exposure to fumes may cause irritation, dermatitis, and acne-like lesions.
 - B. Employee must wear appropriate protective impervious clothing, gloves, and equipment to prevent repeated or prolonged skin contact.
 - C. If contact is not with hot materials, remove contaminated clothing and shoes. Wash affected area with soap or mild detergent, and large amounts of water until no evidence of material remains. Burns from contact with hot material should be treated like thermal burns.

A. Avoid prolonged inhalation of vapors or mist. Product has a low vapor pressure and is not expected to present an inhalation hazard at ambient conditions.

Ingestion A. May cause nausea, gastro-intestinal irritation, and vomiting.

- B. Do not induce vomiting
- C. Treat symptomatically and supportively. Get medical attention immediately. If vomiting occurs, lower heat to prevent aspiration

Eyes A. Contact with eyes may cause redness and irritation. Repeated or prolonged exposure to fumes may cause conjunctivitis.

- B. Employee must wear splash-proof or dust-resistant safety goggles or face shield.
- C. Wash eyes immediately with large amounts of water. Lift upper and lower lids until no evidence of material remains (15 to 20 minutes). Cover with sterile bandages. Get medical attention immediately.

Medical Conditions Aggravated by Exposure

No adverse reactions expected at concentrations normally encountered.

Safe Usage Information - Section VII

Handling, Storage & Other Precautions

This product is not classified as hazardous under DOT reg. Keep away from heat, sparks, and oxidizing agents. Keep container closed when not in use. Observe all Federal, State and Local regulations when handling, storing or disposing of this material.

Action to be Taken in Case of Spill

or Release (Including Disposal)

Shut off area ignition sources. Stop leak if it can be done without risk. Use water spray to reduce vapors. For small spills, use absorbent material and place into container. Dike ahead of large spill for later disposal. Prohibit smoking in affected area. Isolate area and restrict entry.

Control Measures - Section VIII

Ventilation Requirements Provide exhaust ventilation system to meet published exposure limits.

Work Hygiene Practices

Respirator

Selection of respiratory protection must be based upon the airborne level of suspected contaminant. Levels found in the work place must not exceed the working limit of the respirator utilized

Dermal Workers must wear appropriate protective clothing, gloves, and equipment to prevent repeated or prolonged contact with skin.

Eyes Proper eye/face protection must be utilized to protect against splashes and vapors.

Carcinogenicity The individual components of Earthbind™ are not considered to be carcininogenic.

Non-hazardous

Transportation - Section IX

D.O.T. Proper Shipping Name (49 CFR

D.O.T. Placards Required (49 172.101)

| 172.101) | Emulsion | |
|---|------------------------|--|
| D.O.T. Hazard Class (49 CFR 172.101) | NA | |
| UN / NA Code (49 172.101) | NA | |
| Packaging Group (49 172.101) | NA | |
| Bill Of Lading Description (49 172.101) | Non-hazardous Emulsion | |
| D.O.T. Labels Required (49 172.101) | NA | |

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