

ENDURASEAL AB

MATERIAL SAFETY DATA SHEET

A. IDENTIFICATION AND EMERGENCY INFORMATION

Product Name: Enduraseal AB, Driveway Sealer

Chemical Name: Asphalt, inorganic filler and water emulsion. CAS #: N/A, a complex mixture.

Product Appearance and Odor: A dark brown to black thick consistency asphalt emulsion with a petroleum odor.

Emergency Telephone Number: 314-991-2180

B. COMPONENTS AND HAZARD INFORMATION

| <u>Components</u> | <u>CAS#</u> | <u>ACGIHTLY</u> | <u>Approx. Wt %</u> |
|-------------------|-------------|------------------------------|---------------------|
| Asphalt Emulsion | 8052.42.4 | .2mg/m ³ | <40% |
| Ball Clay | 1332-58-7 | 5.0 mg/m ³ (Dust) | <1.5% |
| Silica Sand | 14808-60-7 | .1mg/m ³ (Dust) | <.5% |
| Acrylic Polymer | | Not Established | |

Hazardous Materials Identification System: (HMIS Rating)

Health – 1

Flammability – 0

Reactivity – 0

C. PRIMARY ROUTES OF ENTRY AND EMERGENCY FIRST AID PROCEDURES

Eye Contact: Vapors and mist may cause irritation to the eyes and mucus membranes. Symptoms may include a burning sensation, photophobia, redness, swelling, tearing and possible corneal changes. If eye contact occurs, flush with water for at least 15 minutes and seek medical attention.

Skin Contact: Exposure causes skin irritation characterized by skin itching, burning, swelling, and redness. Photosensitization of the skin may occur which can be accentuated by sunlight. If contact occurs, wash affected area with waterless hand cleaner. If irritation persists, seek medical attention.

Inhalation: Acute effects caused from overexposure to asphalt may include coughing, sneezing and swollen or irritated sinuses. Repeated and/or prolonged contact to high concentrations may result in toxic effects, such as respiratory difficulties, convulsions, and possible cardiovascular collapse may occur. If inhaled, remove to fresh air. If not breathing, give artificial respiration or oxygen as needed. Seek medical attention.

Ingestion: Could cause gastrointestinal tract irritation followed by nausea, vomiting, abdominal discomfort, rapid pulse, etc. DO NOT induce vomiting. Give water or clear liquids. Consult local Poison Control Center, IMMEDIATELY!

D. FIRE AND EXPLOSION HAZARD INFORMATION

Flash Point:

212° F

ASTM D-3143

Auto Ignition Temp:

Not established

National Fire Protection Association (NFPA) – Hazard Identification:

Health – 1

Flammability – 0

Reactivity – 0

Handling Precautions: Keep containers tightly closed. Keep containers cool, dry and away from sources of ignition. Keep product from freezing.

Flammable or explosive Limits: (Approximate % by volume in air)

Lower (LEL) not established Upper (UEL) not established

Extinguishing Media and Fire fighting procedure: Extinguish with dry chemicals and CO₂. The use of self contained breathing apparatus is recommended for firefighters. Universal type foam and water fog are effective. Keep from all ignition sources.

Decomposition Products under Fire Conditions: Fumes, Smoke, CO₂, Carbon monoxide, aromatic, hydrocarbons, if combustion is incomplete.

“Empty” Container Warning: Dispose of in an environmentally safe manner and in accordance with Federal, State and local regulations. “Empty” containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, OR OTHER SOURCES OF IGNITION. They may explode and cause injury or Death. Do not attempt to clean since residue is difficult to remove. For work on tanks, refer to OSHA regulation ANSI Z49.1 and other governmental and industrial references pertaining to cleaning repairing welding or other contemplated operations.

E. HEALTH AND HAZARD INFORMATION

Variability Among Individuals: Health studies have shown that individual sensitivities vary from person to person. As precaution, exposure to vapors, liquids, mist, or fume should be minimized.

Effects of Overexposure: (Signs and symptoms of exposure) Chronic overexposure (as defined by OSHA standards) may cause cancer. Harmful if inhaled or swallowed. Causes eye and skin irritation.

Nature of Hazards and Toxicity Information: Liquid can cause skin irritation and dermatitis, including acne. Asphalt phytotoxic substance which, in the presence of ultraviolet light (sunlight), can cause a skin reaction similar to exaggerated sunburn, frequently causing blisters.

Ingestion: Can cause sever gastrointestinal irritation, nausea, and vomiting if swallowed: fatal in large amounts.

Inhalation quartz may cause silicosis, breathing difficulties & lung damage.

Pre-existing Medical Conditions Skin, eye, and respiratory may be aggravated by use.

F.**PHYSICAL DATA**

The following are approximate or typical values and should not be used for precise design purposes.

Boiling Point: 220° F.

Vapor Pressure (mm HG): <24mm @ 77° F.

Specific Gravity: 1.18

Vapor Density (Air = 1): > 1.0

Molecular Weight: N/A

% Volatile by Volume: <60

Ph: N/A

Solubility in Water: dispersible

Viscosity: A medium consistency, < 10,000 cps @ 77° F

G.**REACTIVITY**

Stability: _____unstable ___X___stable

Hazardous Polymerization: _____may occur ___X___will not occur

Hazardous Decomposition Products: May cause fumes, smoke, CO², carbon monoxide.

Incompatibility (Materials to Avoid): None Known.

Conditions to Avoid: Keep from heat, sparks, open flame and other sources of ignition

DO NOT FREEZE

H.**ENVIRONMENTAL INFORMATION**

Steps to be taken if spilled or released:

- Remove ignition sources.
- Keep people away.
- Stay upwind and away from spill.
- Ventilate area if necessary.
- Remove free product, add sand or other suitable absorbents.
- Prevent discharge to drain, sewers or waterways.
- Dispose of according to Federal, State and local regulations.

I.**PROTECTIONS AND PRECAUTIONS**

Ventilation: Use only in well ventilated areas.

Respiratory Protection: Use a NIOSH/MSHA approved breathing apparatus when TLV is exceeded.

Protective Gloves: Chemical resistant gloves are recommended.

Eye Protection: Chemical splash goggles or safety glasses needed when working, pouring or transferring this material. **DO NOT WEAR CONTACT LENSES IN THE PRESENCE OF THIS MATERIAL UNLESS SPLASH GOGGLES ARE WORN.**

Other Protective Equipment: Use chemical resistant apron or other impervious clothing, if needed, to avoid contaminating regular clothing which could result in prolonged or repeated skin contact.

Work Practices/Engineering Controls: Keep containers closed when not in use. **DO NOT STORE NEAR HEAT, SPARKS, FLAME OR STRONG OXIDANTS. DO NOT LET PRODUCT FREEZE.**

Personal Hygiene: Minimize breathing vapor or mist. Avoid prolonged or repeated contact with skin. Remove contaminated clothing: Launder or dry clean before reuse. Remove contaminated shoes and thoroughly dry before reuse. Cleanse skin thoroughly after contact, before breaks and meals, and at the end of the work period. Product is readily removed from skin by waterless hand cleaner followed by washing thoroughly with soap and water.

J.**TRANSPORTATION AND OSHA LABEL INFORMATION**

Transportation Incident Information: For further information relative to spills resulting from transportation incidents, refer to the latest DOT Guidebook.

DOT Identifying Number: Not Established

OSHA Required Label Information: N/A

K.**OTHER**

The information and recommendations contained herein are to the best of Bi-State Emulsions, LLC knowledge and belief, accurate and reliable as of the date issued. Bi-State Emulsions, LLC does not warrant or guarantee their accuracy or reliability, and Bi-State Emulsions LLC shall not be liable for any loss or damage arising out of the use there of. The information and recommendations are offered for the user's consideration, and it is the user's responsibility to satisfy itself that they are suitable and complete for its particular use. The Environmental Information included under section H hereof as the Hazardous Material Identification system (HMIS) and National Fire Protection Association (NFPA) ratings have been included by Bi-State Emulsions LLC in order to provide additional health and hazard classification information. The recommended are based upon the criteria supplied by the developers of these rating system, together with Bi-State Emulsions LLC interpretation of the date.

For other product information, contact:

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Phone 314-645-1818 (manufacture)

Missouri Petroleum, 1620 Woodson Rd., St. Louis, MO 63114,

Phone 314-991-2180 (marketing)

24 HOUR EMERGENCY SPILL NUMBER 1-800-728-2482