



MEIGS

Paving Asphalts & Emulsions

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Asphalt Emulsion, Anionic

Synonyms: Anionic Emulsified Asphalt, EM-8

Company: Henry G. Meigs, LLC
1220 Superior Street
Portage, WI 53901

WEBSITE: www.hgmeigs.com
Telephone: 800.362.1440
Fax: 608.742.1805

24 Hour Emergency Phone #: Chemtrec: Transport-800.424.9300
Medical-800.441.3637

Recommended use of this product: Emulsified asphalt for use in pavement construction and preservation.

2. HAZARDS IDENTIFICATION

OSHA Hazard Classification:

Emergency Overview:

Hydrogen Sulfide (H₂S) gas may accumulate in the air space above asphalt during storage or transport. Hydrogen Sulfide is harmful or fatal if inhaled.

Heated Asphalt can cause thermal burns. Eye protection, as well as protective clothing, should be worn while working with hot asphalt.

Prolonged/repeated contact with asphalt may cause skin irritation or dermatitis.

Signal Word: Warning

Symbol(s) (pictogram(s))



Hazard statement(s):

H333 May be harmful if inhaled. Category 5

Precautionary statement(s):

H313 May be harmful in contact with skin. Category 5

Hazards not otherwise classified:

Pre-existing skin, eye, and respiratory disorders may be aggravated by exposures to components of this product. May cause photo-irritation (light sensitivity) in some individuals.

3. COMPOSITION/INFORMATION ON INGREDIENTS:**Formula:**

Component	Concentration
Asphalt CAS# 8052-42-4	57-73%
Water	27-43%
Hydrogen Sulfide, CAS #7783-06-4	Trace
Polycyclic Aromatic Hydrocarbons, CAS #130498-29-2	Trace
Emulsifier	0.1-3%
Styrene/Butadiene Diblock Copolymer, CAS #9003-55-8	0-3%
Sulfur Compounds	0-1%
Styrene/Butadiene Latex Polymer (proprietary)	0-3%
Petroleum Distillate	0-15%
Bio-based Blend Stock, CAS #68918-91-2	0-4%
Anti-strip Additive	0-3%

All concentrations are % by weight.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. FIRST AID MEASURES**Inhalation:**

Fumes may cause headache, blurred vision, nasal and respiratory irritation, nausea, and drowsiness. Remove victim to uncontaminated area. Give artificial respiration if not breathing. Seek medical attention immediately.

Skin Contact:

Hot Asphalt Emulsion: DO NOT DELAY. Immediately flush with cool water or completely submerge affected area in ice water for at least 15 minutes. Ice (or "cold packs") may be used in the event that water is unavailable. Be aware that overuse of ice may increase the risk of hypothermia. Only remove clothing if it is not adhering to the skin. Do not place any sheets or towels on top of the asphalt due to risk of adhesion. Do not attempt to remove asphalt as this could cause further tissue damage. Natural separation will occur within 48-72 hours. Seek immediate medical attention.

Treatment for shock:

1. Keep victim lying down and quiet.
2. Keep victim covered with a blanket or something similar to keep body temperature at normal, 98°F.
3. Keep victim's head lower than feet to promote blood supply to head and chest.

Cold Asphalt Emulsion: Clean exposed skin with waterless hand cleaner and then wash with soap and water.

Eye contact:

Rinse cautiously with water for at least 15 minutes. If possible remove contact lenses. If eye irritation persists, seek medical attention.

Ingestion:

No significant health hazards identified. Dilute by drinking 2-3 glasses of water.

Most important symptoms/effects, acute and delayed:

Prolonged or repeated contact with asphalt may cause skin irritation or dermatitis. Pre-existing skin, eye, and respiratory disorders may be aggravated by exposure to the components of this product.

5. FIREFIGHTING MEASURES

Suitable extinguishing media:

Carbon Dioxide, regular Dry Chemical, regular Foam

Unsuitable extinguishing media:

CAUTION: Contact of hot water with asphalt leads to a violent expansion as the water turns to steam. Evacuate the area and fight fire from a safe distance.

Specific hazards from combustion:

Asphalt Emulsion is not a combustible liquid per the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard.

Special protective equipment for fire-fighters:

Avoid inhalation of fumes. Stay upwind and keep out of low areas. Fire fighters should wear full-face mask and full protective equipment including a positive pressure self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, Protective equipment:

Keep unprotected persons away from spill.

Use appropriate personal protective equipment consisting of proper eye/face protection, leather/neoprene gloves, Tyvek suit and leather boots.

Emergency procedures:

Take immediate steps to stop and contain the release. Containment may be safely accomplished with a soil dike. For small spills, absorb the asphalt with sand or other non-combustible materials. Notify local authorities and the National Response Center (800.424.8802) if required.

Environmental precautions:

Keep out of waterways and sewers.

Methods for remediation:

Spilled material is to be collected and stored in retention areas until product can be recycled for future use.

7. HANDLING AND STORAGE**Precautions for safe handling:**

Keep away from all ignition sources. Do not smoke in areas where asphalt is being used or stored. Do not eat or drink where asphalt is being used or stored. Use good personal hygiene practices when working with asphalt. When opening covers and outlet caps on storage tanks, use face shield and gloves to avoid possible injuries from pressurized asphalt.

Conditions for safe storage:

Store in a well ventilated area, in an appropriately labeled container. Outside storage is recommended. Heating coils in storage and transportation must be covered with at least 8" of asphalt.

CAUTION:

Empty containers may contain toxic/combustible or explosive residue or vapors. Do not reuse without adequate precautions.

CAUTION:

Vapors containing hydrogen sulfide may accumulate in the air space above asphalt in storage or transportation vessels. Hydrogen sulfide is harmful or fatal if inhaled. Hydrogen sulfide gas quickly fatigues the sense of smell. Use appropriate respiratory protection to prevent exposure. Do not enter enclosed or confined space without a self-contained breathing apparatus and other protective equipment.

Incompatibilities:

Avoid storing with strong oxidizers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**OSHA Permissible Exposure Limits:**Asphalt (petroleum) fumes:

0.5 mg/m³ ACGIH 8-hour TWA (inhalable fraction)
5mg/m³ 15-minute REL

Hydrogen Sulfide:

20ppm OSHA ceiling
50ppm OSHA peak (Max duration: 10 minutes once, only if no other measured exposure occurs)
1ppm ACGIH TWA
5ppm ACGIH STEL

Personal protective equipment:

The level of protection and types of controls necessary will vary depending on exposure conditions.

Respiratory protection

Protection not required under normal conditions with adequate ventilation. Do not breathe mist or vapor. A positive pressure self-contained breathing apparatus should be used whenever entering a confined space, for firefighting, or when a workers face is within 3 feet of an open hatch.

Hand protection

Insulated gloves should be worn when handling hot asphalt.

Eye protection

Use goggles/face shield or safety glasses when handling.

Skin and body protection

Natural fiber long sleeved shirts and pants without cuffs should be worn. Synthetic fibers can melt and fuse to the skin when in contact with hot asphalt. Rubberized suits, coats or Tyvek apparel and leather boots may be needed for some maintenance operations with hot asphalt.

Hygiene measures

Intermittent or occasional skin contact with cool asphalt emulsion is not expected to have serious health effects as long as good personal hygiene measures such as those outlined in this Safety Data Sheet are followed.

9. PHYSICAL AND CHEMICAL PROPERTIES

The following data are approximate or typical values and should not be used for precise designs.

Appearance: Chocolate Brown Liquid

Odor: Mild to Moderate Petroleum

pH: >7

Initial boiling point: ~ 212°F

Flash point: N/A

Flammability: N/A

Relative density: 8.4 lbs/gal

Solubility in water: 97.5% min. (disperses in water)

Specific Gravity: ~ 1.0

Auto-ignition temperature: Product is not self-igniting

Viscosity: <800 SFS @ 122°F

Safety data: Asphalt Emulsion is produced by milling petroleum asphalt into microscopic particles and then dispersing it in water with a chemical emulsifier.

10. STABILITY AND REACTIVITY

Reactivity/Incompatible Materials:

Incompatible with oxidizing materials such as chlorates, nitrates, and peroxides.

Chemical stability:

Asphalt Emulsion is stable at normal temperatures and pressures.

Conditions to avoid:

Avoid all sources of ignition around hot asphalt and asphalt vapors.

Hazardous decomposition products:

Asphalt Emulsion will not polymerize.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Inhalation: Hydrogen Sulfide (H₂S) gas, which may accumulate in airspace above stored asphalt, is irritating and can be fatal. The "rotten egg" odor of H₂S should **NOT** be used as a reliable indicator as to the presence of the gas.

Symptoms of exposures: H₂S odor fatigue readily occurs as exposure to the gas increases.

Delayed and immediate effects: Odor sensation is immediately lost at concentrations of H₂S greater than 150ppm. At concentrations near or higher than 1000ppm, H₂S causes rapid death due to metabolic asphyxiation.

Ingestion: No serious health hazards have been identified with ingesting asphalt. If large amount is swallowed, get medical attention.

Skin: Polycyclic aromatic hydrocarbons are naturally occurring constituents of crude oils. Since asphalt is refined from crude oil, polycyclic aromatic hydrocarbons may be present in trace amounts in the product; some have been shown to be carcinogenic after prolonged or repeated skin contact in laboratory animals. However, the measured concentrations, and the frequency of polycyclic aromatic hydrocarbons occurring in paving asphalts has been low.

Chronic effects from short- and long-term exposure: Repeated or prolonged exposure to some polycyclic aromatic hydrocarbons has been associated with effects to the liver, kidneys, immune system, and skin. However, the measured concentrations, and frequency of these compounds occurring in paving asphalt has been low.

Potential or suspected carcinogen based upon listing on NTP, IARC, or by OSHA:

The National Institute for Occupational Safety and Health (NIOSH) concludes that there is insufficient evidence for an association between lung cancer and exposure to paving asphalt fumes. Serious health effects are not expected as long as good personal hygiene is practiced and safety measures outlined in this SDS are followed.

Eye contact: May cause serious eye irritation.

12. ECOLOGICAL INFORMATION*

Eco toxicity: N/A

Persistence and degradability: N/A

Bio accumulative potential: N/A

Mobility in soil: N/A

Other adverse effects: No known significant effects or critical hazards

13. DISPOSAL CONSIDERATIONS*

Methods of disposal:

It is the responsibility of the user to follow all local, state, and federal regulations applicable to disposal.

14. TRANSPORT INFORMATION*

US DOT 49 CFR 172.101

Shipping Name: Asphalt, Emulsion, Liquid, n.o.s

DOT Identification Number: N/A

DOT Classification Number: N/A

Packing Group: N/A

Placards Required: N/A

15. REGULATORY INFORMATION*

SARA Title III Section 302 Extremely Hazardous Substances (40 CFR Parts 355):

This product is not regulated under Section 302 of SARA and 40 CFR Part 355.

SARA Section 304 (40 CFR Part 355.40):

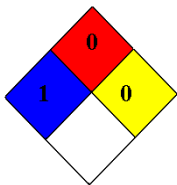
This product is not regulated under Section 304 of SARA and 40 CFR Part 355.

U.S. Inventory (TSCA):

This product is a mixture of chemical substances currently listed on the EPA/TSCA Inventory of Chemical Substances.

16. OTHER INFORMATION

OSHA Hazard Classification:



NFPA Ratings (Scale 0-4): Health = 1 Fire = 0 Reactivity = 0

Hazard Rating:

0-Least

1-Slight

2-Moderate

3-High

4-Extreme

Date of preparation/version of the data sheet:

12.10.2015; Revision 4.1

Further Information:

Disclaimer: The data, statements, and information contained in this SDS are believed to be accurate and reliable. However, Henry G. Meigs, LLC makes no warranty or guarantee, expressed or implied regarding the accuracy of this data or any results obtained from this data. Henry G. Meigs, LLC does not accept any responsibility for any injury, loss, or damage from the use of this information or from use of the product described within.

***Note:** Since other Agencies regulate this information, OSHA will not be enforcing Sections 12 through 15 (29CFR 1910.1200(g)(2)).

Employers must ensure that SDSs are readily accessible to employees.

See Appendix D of 1910.1200 for a detailed description of SDS contents.