

1. Product and Company Identification

Material name AE-3M
Version # 01
Revision date 11-14-2011
CAS # Mixture
Manufacturer
Manufacturer: Ergon Asphalt & Emulsions, Inc.
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 Jackson MS 39215-1639
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2. Hazards Identification

Emergency overview Harmful if absorbed through skin or swallowed.
OSHA regulatory status This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects
Routes of exposure Inhalation.
Eyes Contact with eyes may cause irritation.
Skin Health injuries are not known or expected under normal use.
Inhalation Prolonged inhalation may be harmful. Health injuries are not known or expected under normal use.
Ingestion Health injuries are not known or expected under normal use.
Target organs Mucous membranes. Skin. Digestive tract.
Signs and symptoms Irritation of eyes and mucous membranes.
Potential environmental effects May cause long-term adverse effects in the environment.

3. Composition / Information on Ingredients

Hazardous components	CAS #	Percent
ASPHALT	8052-42-4	40 - 70
FUEL OIL, NO. 2	68476-30-2	5 - 15
Non-hazardous components	CAS #	Percent
WATER	7732-18-5	20 - 35
SODIUM HYDROXIDE	1310-73-2	0 - 1
Other components below reportable levels		0 - 1

4. First Aid Measures

First aid procedures
Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower. Lotion or hanc cream may aid in the removal of asphalt. If molten asphalt strikes exposed skin, cool immediately by quenching with cold water.
Inhalation If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist. Apply artificial respiration if needed.

Ingestion

Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately. DO NOT induce vomiting. Get medical attention immediately.

5. Fire Fighting Measures**Flammable properties**

By heating and fire, harmful vapors/gases may be formed.

Extinguishing media**Suitable extinguishing media**

Foam. Dry powder. Carbon dioxide (CO₂). Do not use water as an extinguisher.

Protection of firefighters**Specific hazards arising from the chemical**

H₂S

Protective equipment and precautions for firefighters

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Fire fighting equipment/instructions

In case of fire and/or explosion do not breathe fumes. ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do so without risk. In the event of fire, cool tanks with water spray. Cool containers exposed to flames with water until well after the fire is out. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods

In the event of fire and/or explosion do not breathe fumes. In the event of fire, cool tanks with water spray.

6. Accidental Release Measures**Personal precautions**

Keep people away from and upwind of spill/leak. Ventilate closed spaces before entering them.

Methods for containment

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewer, basements or confined areas.

Methods for cleaning up

Large Spills: Dike far ahead of spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use.

7. Handling and Storage**Handling**

DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. All equipment used when handling the product must be grounded. Avoid prolonged exposure. Trace amounts of hydrogen sulfide, a very highly toxic gas, may be present with this material. Keep face clear of tank and/or tank car openings.

Storage

The pressure in sealed containers can increase under the influence of heat. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a well-ventilated place. Keep container tightly closed.

8. Exposure Controls / Personal Protection**Occupational exposure limits****US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
ASPHALT (8052-42-4)	TWA	0.5 mg/m ³	Inhalable fraction.
FUEL OIL, NO. 2 (68476-30-2)	TWA	100 mg/m ³	Inhalable fraction and vapor.
SODIUM HYDROXIDE (1310-73-2)	TWA	2 mg/m ³	

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
SODIUM HYDROXIDE (1310-73-2)	PEL	2 mg/m ³

Exposure guidelines

US ACGIH Threshold Limit Values: Skin designation

FUEL OIL, NO. 2 (CAS 68476-30-2)

Can be absorbed through the skin.

Engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal protective equipment

Eye / face protection

Chemical goggles and face shield are recommended.

Skin protection

Avoid contact with the skin. Wear suitable protective clothing. Use of impervious boots is recommended. Use of an impervious apron is recommended.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General hygiene considerations

Do not eat, drink or smoke when using the product.

9. Physical & Chemical Properties

Appearance

Brown to black in color.

Physical state

Liquid.

Form

Liquid.

Color

Dark brown.

Odor

Mild. Tar-like

Odor threshold

Tar odor

pH

11 - 12

Vapor pressure

< 1 mm Hg @ 20 C

Vapor density

>= 1

Boiling point

212 °F (100 °C)

Melting point/Freezing point

Not available.

Solubility (water)

Slightly soluble

Specific gravity

1.01

Relative density

Not available.

Flash point

> 212 °F (> 100 °C)

Flammability limits in air, upper, % by volume

Not available.

Flammability limits in air, lower, % by volume

Not available.

Auto-ignition temperature

> 444 °F (> 228.9 °C)

Evaporation rate

< 1

Percent volatile

19 - 22 %

Other data

Density

8.42 lb/gal

Flammability class

IIIB

10. Chemical Stability & Reactivity Information

Chemical stability

Material is stable under normal conditions.

Conditions to avoid

Heat, flames and sparks. Avoid contact with oxidizing agents.

Incompatible materials

Not available.

Hazardous decomposition products

Irritants. Combustion products may include sulfur oxides and hydrogen sulfide. Carbon Dioxide. Carbon monoxide.

Possibility of hazardous reactions

Hazardous polymerization does not occur.

11. Toxicological Information

Toxicological data

Product

AE-3M (Mixture)

Test Results

Acute Oral LD50 Rat: 109.0909 g/kg estimated

Acute Other LD50 Mouse: 9302.3252 mg/kg estimated

Components

Test Results

SODIUM HYDROXIDE (1310-73-2)

Acute Other LD50 Mouse: 40 mg/kg

FUEL OIL, NO. 2 (68476-30-2)

Acute Oral LD50 Rat: 12 g/kg

Chronic effects

Prolonged inhalation may be harmful.

Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

ACGIH Carcinogens

ASPHALT (CAS 8052-42-4)

A4 Not classifiable as a human carcinogen.

FUEL OIL, NO. 2 (CAS 68476-30-2)

A3 Confirmed animal carcinogen with unknown relevance to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

ASPHALT (CAS 8052-42-4)

2B Possibly carcinogenic to humans.

FUEL OIL, NO. 2 (CAS 68476-30-2)

3 Not classifiable as to carcinogenicity to humans.

3 Not classifiable as to carcinogenicity to humans.

12. Ecological Information

Ecotoxicological data

Product

AE-3M (Mixture)

Test Results

EC50 Daphnia: 8044.186 mg/l 48 hours estimated

LC50 Fish: 29069.7676 mg/l 96 hours estimated

Components

Test Results

SODIUM HYDROXIDE (1310-73-2)

EC50 Water flea (Ceriodaphnia dubia): 34.59 - 47.13 mg/l 48 hours

LC50 Western mosquitofish (Gambusia affinis): 125 mg/l 96 hours

* Estimates for product may be based on additional component data not shown.

Ecotoxicity

Contains a substance which causes risk of hazardous effects to the environment

Environmental effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal

Persistence and degradability

Not available.

13. Disposal Considerations

Disposal instructions

Dispose of waste and residues in accordance with local authority requirements.

14. Transport Information

DOT

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations

All components are on the U.S. EPA TSCA Inventory List.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2))

Not regulated

DEA Essential Chemical Code Number

Not regulated

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Not regulated

DEA Exempt Chemical Mixtures Code Number

Not regulated

CERCLA (Superfund) reportable quantity

SODIUM HYDROXIDE: 1000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
 Immediate Hazard - Yes
 Delayed Hazard - Yes
 Fire Hazard - No
 Pressure Hazard - No
 Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

ASPHALT (CAS 8052-42-4) Listed: January 1, 1990 Carcinogenic.

US - New Jersey RTK - Substances: Listed substance

ASPHALT (CAS 8052-42-4) Listed.

SODIUM HYDROXIDE (CAS 1310-73-2) Listed.

US - Pennsylvania RTK - Hazardous Substances: Listed substance

ASPHALT (CAS 8052-42-4) Listed.

FUEL OIL, NO. 2 (CAS 68476-30-2) Listed.

SODIUM HYDROXIDE (CAS 1310-73-2) Listed.

US - Pennsylvania RTK - Hazardous Substances: Special hazard

ASPHALT (CAS 8052-42-4) Special hazard.

16. Other Information**Further information**

HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings

Health: 1
 Flammability: 1
 Physical hazard: 0

NFPA ratings

Health: 1
 Flammability: 1
 Instability: 0

Disclaimer

Information for this material safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the mandatory requirements of OSHA.

Issue date

Not available.