

1. Product and Company Identification

Material name AES-300
Version # 02
Revision date 11-17-2011
CAS # Mixture
Manufacturer
Manufacturer: Ergon Asphalt & Emulsions, Inc.
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 Jackson MS 39215-1639
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2. Hazards Identification
Potential health effects

Routes of exposure Inhalation.
Eyes Contact with eyes may cause irritation.
Skin May lead to photosensitization and drying of the skin.
Inhalation Prolonged inhalation may be harmful. Prolonged exposure may result in dizziness or nausea
Ingestion Irritating to mucous membranes and gastrointestinal tract. May cause thermal burns.

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	60 - 65
FUELS, DIESEL, NO. 2	68476-34-6	0 - 17
Non-hazardous components	CAS #	Percent
WATER	7732-18-5	20 - 35
Other components below reportable levels		2 - 7

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 If molten asphalt strikes exposed skin, cool immediately by quenching with cold water. Lotion or hand cream may aid in the removal of asphalt. Rinse skin with water/shower. Wash contaminated clothing before reuse. Wash the skin immediately with soap and 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.
Ingestion Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately. Do not induce vomiting.

5. Fire Fighting Measures

Extinguishing media

Suitable extinguishing media Water. Water spray. Foam. Dry powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Protection of firefighters

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. Structural firefighters protective clothing will only provide limited protection.

Fire fighting equipment/instructions

In case of fire and/or explosion do not breathe fumes. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Move containers from fire area if you can do so without risk. In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers. 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. Use water spray to cool unopened containers.

Hazardous combustion products

Carbon monoxide and carbon dioxide. Sulfur dioxide.

6. Accidental Release Measures

Personal precautions

Keep unnecessary personnel away. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not touch or walk through spilled material.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not contaminate water.

Methods for containment

For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Use water spray to reduce vapors or divert vapor cloud drift. Allow material to solidify, and scrape up.

Methods for cleaning up

Should not be released into the environment. Dike far ahead of spill for later disposal.

Never return spills in original containers for re-use. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

Other information

Stop spill at source. Confine spill by diking or impoundment. Remove sources of heat or ignition. Clean up in accordance with all applicable regulations.

7. Handling and Storage

Handling

Do not add water to hot product. This may result in frothing of the mixture causing hot asphalt to overflow the container. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. 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. Use only in area provided with appropriate exhaust ventilation. Avoid prolonged exposure. Avoid release to the environment.

Storage

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

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.
FUELS, DIESEL, NO. 2 (68476-34-6)	TWA	100 mg/m ³	Inhalable fraction and vapor.

Exposure guidelines

US ACGIH Threshold Limit Values: Skin designation

FUELS, DIESEL, NO. 2 (CAS 68476-34-6)

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

Thermally protective, chemical resistant apron and long sleeves are recommended when volume of hot material is significant. Chemical/oil resistant clothing is recommended. Use appropriate hand protection.

Respiratory protection

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

General hygiene considerations

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical & Chemical Properties

Appearance

Brown to black in color.

Physical state

Liquid.

Form

Liquid.

Color

Not available.

Odor

Tar-like

Odor threshold

Not available.

pH

10 - 12

Vapor pressure

< 1 mm Hg

Vapor density

> 1

Boiling point

212 °F (100 °C)

Melting point/Freezing point

Not available.

Solubility (water)

Not available.

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

> 400 °F (> 204.4 °C)

Evaporation rate

< 1

Percent volatile

15 - 16 % @ 20 Celsius

Other data

Density

8.2 - 8.4 lb/gal

Flammability class

Combustible IIIB estimated

10. Chemical Stability & Reactivity Information

Chemical stability

Material is stable under normal conditions.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents. Avoid contact with acids. Cationic emulsions.

Hazardous decomposition products

Carbon Dioxide. Carbon monoxide. Hydrogen sulfide.

Possibility of hazardous reactions

Hazardous polymerization does not occur.

11. Toxicological Information

Toxicological data

Product	Test Results
AES-300 (Mixture)	Acute Other LD50 Mouse: 4210.5264 mg/kg estimated
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.
FUELS, DIESEL, NO. 2 (CAS 68476-34-6)	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. 3 Not classifiable as to carcinogenicity to humans.

12. Ecological Information

Ecotoxicological data

Product	Test Results
AES-300 (Mixture)	EC50 Daphnia: 3641.0527 mg/l 48 hours estimated LC50 Fish: 13157.8945 mg/l 96 hours estimated

* 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 this material and its container to hazardous or special waste collection point. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.
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14. Transport Information

DOT

Not regulated as dangerous goods.

Further information	Asphalt Emulsion
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15. Regulatory Information

US federal regulations

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

None

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
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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)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
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.

US - Pennsylvania RTK - Hazardous Substances: Listed substance

ASPHALT (CAS 8052-42-4) Listed.

FUELS, DIESEL, NO. 2 (CAS 68476-34-6) 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 The information provided in this Safety Data Sheet is correct to the best of our knowledge information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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This data sheet contains changes from the previous version in section(s): Physical & Chemical Properties: Multiple Properties
 Transport Information: Further information