SAFETY DATA SHEET



1. Identification

Product identifier Anionic Emulsion Other means of identification Not available.

Synonym(s) AE-60, AE-90, AE-200, AE-200H, EP-RS, RS-1, RS-1h, RS-2, SP-MS

Recommended use **Asphalt Paving Recommended restrictions** None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Manufacturer: Ergon Asphalt & Emulsions, Inc.

Address: P. O. Box 1639

Jackson, MS 39215-1639

Website: www.ergonasphalt.com

Telephone: 1-800-222-7122 (Customer Service)

E-mail: sds@ergon.com

24 hour Emergency North America 1-800-424-9300; International 1-703-527-3887

(CHEMTREC):

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Skin corrosion/irritation Category 1

> Serious eye damage/eye irritation Category 1

Environmental hazards Not classified. **OSHA** defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Causes serious eye damage. Causes severe skin burns and eye damage.

Prevention Do not breathe mist/vapors/spray. Wash hands thoroughly after handling. Wear protective

gloves/eye protection/face protection.

Response Wash hands after handling. Wash contaminated clothing before reuse. IF INHALED: Remove victim

> to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF

> SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON

CENTER or doctor/physician.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information Vapors containing hydrogen sulfide may accumulate during storage or transport. HYDROGEN

SULFIDE (H2S) can be harmful or fatal if inhaled.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
ASPHALT		8052-42-4	55 - 70
WATER		7732-18-5	25 - 45
Mineral spirits		8052-41-3	0 - 15
Tall Oil		8006-26-4	0.5 - 3

Material name: Anionic Emulsion SDS US **Chemical name** Common name and synonyms **CAS** number % 1310-73-2 SODIUM HYDROXIDE < 1 Other components below reportable levels 0.1913551401

4. First-aid measures

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.

Skin contact If clothing sticks to the skin, do not remove. Lotion or hand cream may aid in the removal of

asphalt. Wash contact areas with soap and water. If needed, seek medical attention.

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. DO NOT induce vomiting. Get medical attention immediately. If ingestion of a large

amount does occur, call a poison control center immediately.

Most important

symptoms/effects, acute and

delayed

Direct contact with eyes may cause temporary irritation.

Indication of immediate medical attention and special

Treat symptomatically.

treatment needed **General information**

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Foam. Dry chemical powder. Carbon dioxide (CO2).

During fire, gases hazardous to health may be formed.

clothing will only provide limited protection.

Water. Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Special protective equipment

and precautions for

Fire-fighting equipment/instructions

firefighters

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.

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

Specific methods

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

water spray.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas.

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

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Ventilate area and avoid breathing vapors or mist. For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Avoid prolonged exposure. Use only in well-ventilated areas. Hydrogen sulfide, a very highly toxic gas, may be present with this material. Keep face clear of tank and/or tank car openings. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site.

Material name: Anionic Emulsion SDS US Conditions for safe storage, including any incompatibilities

Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Do not allow material to freeze.

8. Exposure controls/personal protection

Occupational exposure limits

IIS OSHA Table 7-1	Limits for Air Contaminants	(29 CFR 1910 1000)
OS. OSDA Table Z-1	LIIIIILS IOI AII COIILAIIIIIIAIILS	(52 CLK TATO'TOOD)

Components	Туре	Value
Mineral spirits (CAS 8052-41-3)	PEL	2900 mg/m3
SODIUM HYDROXIDE (CAS 1310-73-2)	PEL	500 ppm 2 mg/m3

US. ACGIH Threshold Limit Values

Components	Туре	Value	Form
ASPHALT (CAS 8052-42-4)	TWA	0.5 mg/m3	Inhalable fraction.
Mineral spirits (CAS 8052-41-3)	TWA	100 ppm	
SODIUM HYDROXIDE (CAS 1310-73-2)	Ceiling	2 mg/m3	

US. NIOSH: Pocket Guide to Chemical Hazards

05. N10511. FUCKET Guide to Chemical Hazards			
Components	Туре	Value	Form
ASPHALT (CAS 8052-42-4)	Ceiling	5 mg/m3	Fume.
Mineral spirits (CAS 8052-41-3)	Ceiling	1800 mg/m3	
	TWA	350 mg/m3	
SODIUM HYDROXIDE (CAS 1310-73-2)	Ceiling	2 mg/m3	

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined

occupational exposure limit is not exceeded.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses; chemical goggles (if splashing is possible).

Hand protection Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style

gloves.

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged Other

vapor contact. Plastic or rubber gloves, apron and boots.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate

certified respirators.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

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 and chemical properties

Appearance Brown to black in color.

Physical state Liquid. **Form** Liquid. Color Black. Odor Musty **Odor threshold** Not available.

pН 9 - 12

-94 °F (-70 °C) estimated Melting point/freezing point

Initial boiling point and

boiling range Flash point

212 °F (100 °C)

> 212.0 °F (> 100.0 °C)

Evaporation rate Not available. Not available.

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Material name: Anionic Emulsion

Flammability (solid, gas)

Upper/lower flammability or explosive limits

Flammability limit - lower 0.9 % estimated

(%)

6 % estimated

upper (%)

Flammability limit -

Explosive limit - lower

(%)

Explosive limit - upper

(%)

Not available.

Not available.

Vapor pressure 23.76 mm Hg @ 25 C

Vapor density Not available. **Relative density** Not available.

Solubility(ies)

Solubility (water) Dispersable **Partition coefficient** Not available.

(n-octanol/water)

Not available. **Auto-ignition temperature Decomposition temperature** Not available. **Viscosity** Not available.

Other information

Specific gravity 0.9 - 1.1

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Stable under normal temperature conditions. Possibility of hazardous Hazardous polymerization does not occur.

reactions

Avoid temperatures exceeding the flash point. Contact with incompatible materials. Do not overheat **Conditions to avoid**

product.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

Upon decomposition, this product may yield sulfur dioxide, carbon monoxide, carbon dioxide and/or

low molecular weight hydrocarbons. Hydrogen sulfide.

11. Toxicological information

Information on likely routes of exposure

Ingestion Expected to be a low ingestion hazard. **Inhalation** Prolonged inhalation may be harmful.

Skin contact Causes skin burns.

Eye contact Harmful in contact with eyes.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Product	Species	Test Results	
Anionic Emulsion (CAS Mixture)			
Acute			
Other			
LD50	Mouse	35523.9805 mg/kg estimated	
Components	Species	Test Results	

SODIUM HYDROXIDE (CAS 1310-73-2)

Acute Other

LD50 Mouse 40 mg/kg

Skin corrosion/irritation Hazardous by OSHA criteria.

Material name: Anionic Emulsion SDS US 5867 Version #: 01 Issue date: 03-31-2015

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

Serious eye damage/eye

irritation

Harmful in contact with eyes.

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization May cause skin disorders if contact is repeated or prolonged.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity Risk of cancer cannot be excluded with prolonged exposure. IARC: occupational exposures to

straight-run bitumens and their emissions during road paving are "possibly carcinogenic to

humans" (Group 2B)

IARC Monographs. Overall Evaluation of Carcinogenicity

ASPHALT (CAS 8052-42-4) 2B Possibly carcinogenic to humans.

Mineral spirits (CAS 8052-41-3) 3 Not classifiable as to carcinogenicity to humans.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity Not classified. **Specific target organ toxicity** Not classified.

- single exposure Specific target organ toxicity

ity Not classified.

- repeated exposure

Aspiration hazard Not available.

Chronic effects Prolonged exposure may cause chronic effects.

Further information This product has no known adverse effect on human health.

12. Ecological information

Ecotoxicity Not expected to be harmful to aquatic organisms.

Product		Species	Test Results	
Anionic Emulsion (CAS Mixture)				
Crustacea	EC50	Daphnia	30719.3613 mg/l, 48 hours estimated	
Components		Species	Test Results	
SODIUM HYDROXIDE	(CAS 1310-73-2)			
Aquatic				
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	34.59 - 47.13 mg/l, 48 hours	
Fish	LC50	Western mosquitofish (Gambusia affinis)	125 mg/l, 96 hours	

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

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available. **Partition coefficient n-octanol / water (log Kow)**

Mineral spirits 3.16 - 7.15

Mobility in soil No data available.

Other adverse effectsNo other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in

accordance with all applicable regulations. No components are identified as hazardous wastes.

Disposal recommendations are based on uncontaminated material.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste codeThe waste code should be assigned in discussion between the user, the producer and the waste

disposal company. Not applicable.

Waste from residues / unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal

instructions). Avoid discharge into water courses or onto the ground.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

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14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not available.

Annex II of MARPOL 73/78

and the IBC Code

15. Regulatory information

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

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

ASPHALT (CAS 8052-42-4) Listed. SODIUM HYDROXIDE (CAS 1310-73-2) Listed

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

> Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 No

Hazardous chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

(SDWA)

Not regulated.

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

US. Massachusetts RTK - Substance List

ASPHALT (CAS 8052-42-4) Mineral spirits (CAS 8052-41-3) SODIUM HYDROXIDE (CAS 1310-73-2)

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

ASPHALT (CAS 8052-42-4) Mineral spirits (CAS 8052-41-3) SODIUM HYDROXIDE (CAS 1310-73-2)

US. Rhode Island RTK

SODIUM HYDROXIDE (CAS 1310-73-2)

US. California Proposition 65

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

Material name: Anionic Emulsion SDS US 6/7

International Inventories

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)	No
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

Toxic Substances Control Act (TSCA) Inventory United States & Puerto Rico *A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other information, including date of preparation or last revision

03-31-2015 **Issue date**

Version #

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

References **ACGIH**

EPA: AQUIRE database

NLM: Hazardous Substances Data Base

US. IARC Monographs on Occupational Exposures to Chemical Agents

IARC Monographs. Overall Evaluation of Carcinogenicity National Toxicology Program (NTP) Report on Carcinogens

ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices

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. The information in the sheet was written

based on the best knowledge and experience currently available.

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A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).