

**1. Identification**

**Product identifier** MS-1  
**Other means of identification** None.  
**Recommended use** Not available.  
**Recommended restrictions** None known.  
**Manufacturer/Importer/Supplier/Distributor information**  
**Manufacturer:** Ergon Asphalt & Emulsions, Inc.  
**Address:** 2829 Lakeland Drive  
 Jackson, MS 39232  
**Website:** www.ergonasphalt.com  
**Telephone:** 1-800-222-7122 (Customer Service)  
**E-mail:** sds@ergon.com  
**24 hour Emergency (CHEMTREC):** North America 1-800-424-9300; International 1-703-527-3887

**2. Hazard(s) identification**

**Physical hazards** Not classified.  
**Health hazards** Carcinogenicity Category 2  
 Specific target organ toxicity, repeated exposure Category 2  
**Environmental hazards** Not classified.  
**OSHA defined hazards** Not classified.

**Label elements**



**Signal word** Warning  
**Hazard statement** May cause damage to organs through prolonged or repeated exposure. Suspected of causing cancer.  
**Precautionary statement**  
**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe fume/gas/mist/vapors/spray.  
**Response** Wash hands after handling. If exposed or concerned: Get medical advice/attention. Get medical advice/attention if you feel unwell.  
**Storage** Store locked up.  
**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.  
**Hazard(s) not otherwise classified (HNOC)** Molten asphalt presents a thermal hazard.  
**Supplemental information** None.

**3. Composition/information on ingredients**

**Mixtures**

Chemical name	Common name and synonyms	CAS number	%
ASPHALT		8052-42-4	50 - 70
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT		64742-47-8	1 - 10

Chemical name	Common name and synonyms	CAS number	%
KEROSINE (PETROLEUM), HYDRODESULFURIZED		64742-81-0	1 - 10
NAPHTHALENE		91-20-3	<1
Other components below reportable levels			32.0235

#### 4. First-aid measures

<b>Inhalation</b>	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.
<b>Skin contact</b>	If molten asphalt strikes exposed skin, cool immediately by quenching with cold water. Ice or cold packs may be used in the event water is unavailable. Lotion or hand cream may aid in the removal of asphalt. If clothing sticks to the skin, do not remove. Wash contact areas with soap and water. If needed, seek medical attention.
<b>Eye contact</b>	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.
<b>Ingestion</b>	Rinse mouth. DO NOT induce vomiting. Get medical attention immediately. If ingestion of a large amount does occur, call a poison control center immediately.
<b>Most important symptoms/effects, acute and delayed</b>	Not available.

#### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Foam. Dry chemical powder. Carbon dioxide (CO2).
<b>Unsuitable extinguishing media</b>	Do not use a solid water stream as it may scatter and spread fire.
<b>Specific hazards arising from the chemical</b>	Not applicable.
<b>Special protective equipment and precautions for firefighters</b>	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.
<b>Fire fighting equipment/instructions</b>	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. Use of foam or water may cause frothing.
<b>Specific methods</b>	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

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
<b>Methods and materials for containment and cleaning up</b>	Dike far ahead of spill for later disposal. 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.
<b>Environmental precautions</b>	Not available.

#### 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid contact with molten material. Hydrogen sulfide, a very highly toxic gas, may be present with this material. Keep face clear of tank and/or tank car openings. Do not add water to hot product. This may result in frothing of the mixture causing hot asphalt to overflow the container
<b>Conditions for safe storage, including any incompatibilities</b>	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. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
NAPHTHALENE (CAS 91-20-3)	PEL	50 mg/m <sup>3</sup> 10 ppm

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
ASPHALT (CAS 8052-42-4)	TWA	0.5 mg/m <sup>3</sup>	Inhalable fume.
KEROSINE (PETROLEUM), HYDRODESULFURIZED (CAS 64742-81-0)	TWA	200 mg/m <sup>3</sup>	Non-aerosol.
NAPHTHALENE (CAS 91-20-3)	TWA	10 ppm	

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
ASPHALT (CAS 8052-42-4)	Ceiling	5 mg/m <sup>3</sup>	Fume.
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT (CAS 64742-47-8)	TWA	100 mg/m <sup>3</sup>	
KEROSINE (PETROLEUM), HYDRODESULFURIZED (CAS 64742-81-0)	TWA	100 mg/m <sup>3</sup>	
NAPHTHALENE (CAS 91-20-3)	STEL	75 mg/m <sup>3</sup> 15 ppm	
	TWA	50 mg/m <sup>3</sup> 10 ppm	

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

### Exposure guidelines

#### US - California OELs: Skin designation

NAPHTHALENE (CAS 91-20-3) Can be absorbed through the skin.

#### US ACGIH Threshold Limit Values: Skin designation

KEROSINE (PETROLEUM), HYDRODESULFURIZED (CAS 64742-81-0) Can be absorbed through the skin.

NAPHTHALENE (CAS 91-20-3) Can be absorbed through the skin.

**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** Do not get in eyes. Chemical goggles are recommended. Wear safety glasses with side shields (or goggles). Eye wash fountain is recommended.

#### Skin protection

**Hand protection** Wear appropriate chemical resistant gloves. Wear suitable protective clothing as protection against splashing or contamination.

**Other** Not normally needed. Normal work clothing (long sleeved shirts and long pants) is recommended.

**Respiratory protection** Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. No personal respiratory protective equipment normally required.

**Thermal hazards** Not available.

**General hygiene considerations** When using do not smoke. Do not get in eyes. Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

**Appearance** Brown Liquid

**Physical state** Liquid.

**Form** Liquid.

**Color** Dark brown

**Odor** Musty. Tar-like

**Odor threshold** Not available.

**pH** 8 - 12

**Melting point/freezing point** Not available.

**Initial boiling point and boiling range**  $\geq 212$  °F ( $\geq 100$  °C)

**Flash point**  $> 212.0$  °F ( $> 100.0$  °C) Cleveland Open Cup

**Evaporation rate**  $< 1$

**Flammability (solid, gas)** Not available.

**Upper/lower flammability or explosive limits**

**Flammability limit - lower (%)** 0.7 % estimated

**Flammability limit - upper (%)** 5 % estimated

**Explosive limit - lower (%)** Not available.

**Explosive limit - upper (%)** Not available.

**Vapor pressure**  $< 1$  mm Hg @ 20 C

**Vapor density** 0.9 - 1.1

**Relative density** Not available.

**Solubility(ies)**

**Solubility (water)** Dispersible

**Partition coefficient (n-octanol/water)** Not available.

**Auto-ignition temperature**  $> 444$  °F ( $> 228.89$  °C)

**Decomposition temperature** Not available.

**Viscosity** Not available.

**Other information**

**Specific gravity** 1.01

## 10. Stability and reactivity

**Reactivity** Not Reactive

**Chemical stability** Material is stable under normal conditions.

**Possibility of hazardous reactions** Hazardous polymerization does not occur.

**Conditions to avoid** Avoid temperatures exceeding the flash point.

**Incompatible materials** Not available.

**Hazardous decomposition products** Irritants. At thermal decomposition temperatures, carbon monoxide and carbon dioxide.

## 11. Toxicological information

### Information on likely routes of exposure

**Inhalation** Prolonged inhalation may be harmful.

**Skin contact** May be irritating to the skin.

**Eye contact** May be irritating to eyes.

**Ingestion** May be harmful if swallowed and enters airways.

**Symptoms related to the physical, chemical and toxicological characteristics** Not available.

**Information on toxicological effects**

**Acute toxicity**

Components	Species	Test Results
NAPHTHALENE (CAS 91-20-3)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2 g/kg

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

**Skin corrosion/irritation** May be irritating to the skin.

**Serious eye damage/eye irritation** May be irritating to eyes.

**Respiratory or skin sensitization**

**Respiratory sensitization** Not available.

**Skin sensitization** May cause an allergic skin reaction.

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

**Carcinogenicity** Suspected of causing cancer.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

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

NAPHTHALENE (CAS 91-20-3) 2B Possibly carcinogenic to humans.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

Not regulated.

**US. National Toxicology Program (NTP) Report on Carcinogens**

NAPHTHALENE (CAS 91-20-3) Reasonably Anticipated to be a Human Carcinogen.

**Reproductive toxicity** Not classified.

**Specific target organ toxicity - single exposure** Not available.

**Specific target organ toxicity - repeated exposure** May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard** Not available.

**Chronic effects** Prolonged inhalation may be harmful. Not expected to be hazardous by WHMIS criteria

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

**12. Ecological information**

**Ecotoxicity** Contains a substance which causes risk of hazardous effects to the environment. Not expected to be harmful to aquatic organisms.

Product	Species	Test Results
MS-1		
<b>Aquatic</b>		
Crustacea	EC50 Daphnia	1141.4277 mg/l, 48 hours estimated
Fish	LC50 Fish	53.0719 mg/l, 96 hours estimated
Components	Species	Test Results
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT (CAS 64742-47-8)		
Fish	LC50 Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.9 mg/l, 96 hours

Components	Species	Test Results
NAPHTHALENE (CAS 91-20-3)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna) 1.09 - 3.4 mg/l, 48 hours
Fish	LC50	Pink salmon (Oncorhynchus gorbuscha) 1.11 - 1.68 mg/l, 96 hours

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

**Persistence and degradability** Not available.

**Bioaccumulative potential** Not available.

**Partition coefficient n-octanol / water (log Kow)**

NAPHTHALENE 3.3

**Mobility in soil** Not available.

**Other adverse effects** Not available.

### 13. Disposal considerations

**Disposal instructions** Dispose in accordance with all applicable regulations.

**Waste from residues / unused products** Dispose of in accordance with local regulations. 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.

### 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 Annex II of MARPOL 73/78 and the IBC Code** Not available.

### 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)**

NAPHTHALENE (CAS 91-20-3) Listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Not listed.

**Classified hazard categories**

Carcinogenicity  
Specific target organ toxicity (single or repeated exposure)

**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
NAPHTHALENE	91-20-3	<1

**Other federal regulations**

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

NAPHTHALENE (CAS 91-20-3)

**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

### California Proposition 65

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

NAPHTHALENE (CAS 91-20-3)

Listed: April 19, 2002

#### US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT (CAS 64742-47-8)

KEROSINE (PETROLEUM), HYDRODESULFURIZED (CAS 64742-81-0)

NAPHTHALENE (CAS 91-20-3)

## 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)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	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)

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).

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

**Issue date** 10-24-2019

**Version #** 01

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

**NFPA ratings**  
Health: 2  
Flammability: 1  
Instability: 0

## References

ACGIH  
EPA: AQUIRE database  
NLM: Hazardous Substances Data Base  
US. IARC Monographs on Occupational Exposures to Chemical Agents  
Korea. Accidental Release Prevention Substances (Presidential Decree of Toxic Chemical Control Law, Executive Order No. 19203)  
Korea. Dangerous Substances Threshold Quantity (Presidential Decree of Dangerous Substances Safety Management Act No. 18406, Schedule 1)  
Korea. Harmful Substances Prohibited from Manufacturing (Presidential Decree on the Industrial Safety and Health Act (No. 13053), Article 29)  
Korea. Harmful Substances Requiring Permission for Manufacture or Use (Presidential Decree on the Industrial Safety and Health Act (No. 13053), Article 30)  
Korea. Non-Toxic Chemicals List (National Institute of Environment Research (NIER) Public Notice No. 1997-10, as amended)  
Korea. Observational Chemicals (Ministerial Decree of TCCL Article 6)  
Korea. OELs. Regulation for Permitted Concentration of Hazardous Substances (Ministry of Labor (MOL) Public Notice No. 1986-45, as amended)  
Korea. Prohibited Chemical Substances (TCCL Article 11)  
Korea. Regulated volatile organic compounds (VOCs) (MOE Notice No. 2001-36, March 8, 2001, as amended)  
Korea. Restricted Chemical Substances (TCCL Article 11)  
Korea. Toxic Chemical Control Law (TCCL), Existing Chemicals Inventory (KECI)  
Korea. Toxic Chemical Control Law (TCCL), pre-1997 List  
Korea. Toxic Chemicals (TCCL Article 10)  
Korea. Toxic Release Inventory (TRI) Chemicals (TCCL Article 14)  
Taiwan. Dangerous Materials (Rules on Hazard Communication of Dangerous Materials and Toxic Materials)  
Taiwan. Industrial Precursor Chemicals (Categories and Regulations Governing Inspection and Declaration of Industrial Precursor Chemicals, MOEA Decree No. 87, as amended)  
Taiwan. OELs. (Standards on Workplace Atmosphere of Dangerous and Hazardous Materials)  
Taiwan. Toxic Chemical Substances (TCS) (List of Toxic Chemical Substances announced by the Environmental Protection Administration)  
Taiwan. Toxic Materials (Rules on Hazard Communication of Dangerous Materials and Toxic Materials)  
HSDB® - Hazardous Substances Data Bank  
JIS Z 7250: 2005 Safety data sheet for chemical products-Part 1:Content and order of sections  
JCIA GHS Guideline, October 2008  
IARC Monographs. Overall Evaluation of Carcinogenicity  
National Toxicology Program (NTP) Report on Carcinogens  
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices  
Japan Society for Occupational Health, Recommendation of Occupational Exposure Limits

## 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.

## Revision information

Composition / Information on Ingredients: Ingredients  
Physical & Chemical Properties: Multiple Properties  
Regulatory Information: United States  
HazReg Data: International Inventories  
GHS: Classification