

1. Identification

| | |
|---|---|
| Product identifier | BH5350 |
| Other means of identification | None. |
| Recommended use | Not available. |
| Recommended restrictions | None known. |
| Manufacturer/Importer/Supplier/Distributor information | |
| Company Name | ErgonArmor, a division of Ergon Asphalt & Emulsions, Inc. |
| Address | 2829 Lakeland Drive Jackson, MS 39232 USA |
| After hours telephone number | 1-800-222-7122 |
| Normal work hours telephone number | 1-877-982-7667 |
| Website | www.ergonarmor.com |
| E-mail | sds@ergon.com |
| Emergency 24-hour telephone number | CHEMTREC: North America 1-800-424-9300 International 1-800-527-3887 |
| Information on operation hours | 8:00 a.m. to 5:00 p.m. |

2. Hazard(s) identification

| | | |
|------------------------------|---|---|
| Physical hazards | Flammable liquids | Category 3 |
| Health hazards | Skin corrosion/irritation | Category 2 |
| | Serious eye damage/eye irritation | Category 2 |
| | Germ cell mutagenicity | Category 1 |
| | Carcinogenicity | Category 1 |
| | Reproductive toxicity | Category 2 |
| | Specific target organ toxicity, single exposure | Category 3 respiratory tract irritation |
| | Specific target organ toxicity, repeated exposure | Category 1 |
| Environmental hazards | Not classified. | |
| OSHA defined hazards | Not classified. | |
| Label elements | | |



| | |
|-------------------------|--|
| Signal word | Danger |
| Hazard statement | May cause respiratory irritation. Causes serious eye irritation. Causes skin irritation. Causes damage to organs through prolonged or repeated exposure. May cause cancer. Suspected of damaging fertility or the unborn child. Flammable liquid and vapor. May cause genetic defects. |

Precautionary statement

Prevention

Use only non-sparking tools. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only outdoors or in a well-ventilated area. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product. Avoid breathing dust/fume/gas/mist/vapors/spray.

Response

Specific treatment see Section 4 of this SDS. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. In case of fire: Use appropriate media for extinction. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF ON SKIN: Wash with plenty of soap and water.

Storage

Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations. See section 13 of this SDS for disposal instructions.

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

None.

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|--|--------------------------|------------|-----------|
| ASPHALT, OXIDIZED | | 64742-93-4 | 40 - < 50 |
| SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM. | | 64742-95-6 | 10 - 20 |
| 1,2,4-TRIMETHYLBENZENE | | 95-63-6 | 5 - < 10 |
| BENZENE, DIMETHYL | | 1330-20-7 | < 1 |
| QUARTZ | | 14808-60-7 | < 1 |
| BENZENE,1-METHYLETHYL- | | 98-82-8 | < 0.3 |
| Other components below reportable levels | | | 30 - < 40 |

4. First-aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention, if needed.

Skin contact

For hot product, immediately immerse in or flush the affected area with large amounts of cold water to dissipate heat. For minor skin contact, avoid spreading material on unaffected skin. Wash off with soap and plenty of water. If skin irritation occurs: Get medical advice/attention.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. If a contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Get medical attention if irritation develops and persists.

Ingestion

Rinse mouth thoroughly. Call a POISON CENTER or doctor/physician. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed

Not available.

Indication of immediate medical attention and special treatment needed

In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information IF exposed or concerned: Get medical advice/attention. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Get medical attention if symptoms occur. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

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

Unsuitable extinguishing media Do not use water jet.

Specific hazards arising from the chemical Fire may produce irritating, corrosive and/or toxic gases.

Special 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. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Move containers from fire area if you can do so without risk. Do not get water inside container. Some of these materials, if spilled, may evaporate leaving a flammable residue.

Specific methods In the event of fire and/or explosion do not breathe fumes.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep upwind. Keep out of low areas. 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.

Methods and materials for containment and cleaning up Stop the flow of material, if this is without risk. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Never return spills in original containers for re-use.

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not contaminate water. If this material is spilled into navigable waters and creates a visible sheen, it is reportable to the National Response Center.

7. Handling and storage

Precautions for safe handling Avoid heat, sparks, open flames and other ignition sources. Avoid breathing dust/fume/gas/mist/vapors/spray. Wear personal protective equipment. Do not use in areas without adequate ventilation. Avoid prolonged exposure. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Do not empty into drains. Hydrogen sulfide, a very highly toxic gas, may be present with this material. Keep face clear of tank and/or tank car openings.

Conditions for safe storage, including any incompatibilities Store in a well-ventilated place. Keep container closed. Keep container dry. Keep away from food, drink and animal feedingstuffs. Keep out of reach of children. Use care in handling/storage.

8. Exposure controls/personal protection

Occupational exposure limits

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

| Components | Type | Value |
|-------------------------------------|------|----------------------|
| BENZENE, DIMETHYL (CAS 1330-20-7) | PEL | 435 mg/m3 |
| BENZENE,1-METHYLETHYL-(CAS 98-82-8) | PEL | 100 ppm 245 mg/m3 |
| | | 50 ppm |

US. OSHA Table Z-3 (29 CFR 1910.1000)

| Components | Type | Value | Form |
|-------------------------|------|-------------------------------------|---|
| QUARTZ (CAS 14808-60-7) | TWA | 0.3 mg/m3 0.1 mg/m3 2.4 mppcf | Total dust. Respirable. Respirable. |

US. ACGIH Threshold Limit Values

| Components | Type | Value | Form |
|--------------------------------------|------|-------------|----------------------|
| 1,2,4-TRIMETHYLBENZENE (CAS 95-63-6) | TWA | 25 ppm | |
| BENZENE, DIMETHYL (CAS 1330-20-7) | STEL | 150 ppm | |
| BENZENE,1-METHYLETHYL- (CAS 98-82-8) | TWA | 100 ppm | |
| QUARTZ (CAS 14808-60-7) | TWA | 50 ppm | |
| | | 0.025 mg/m3 | Respirable fraction. |

U.S. - NIOSH Components

| Components | Type | Value | Form |
|------------------------------------|------|---------|------|
| ASPHALT, OXIDIZED (CAS 64742-93-4) | REL | 5 mg/m3 | |

US. NIOSH: Pocket Guide to Chemical Hazards Components

| Components | Type | Value | Form |
|--------------------------------------|------|----------------------|------------------|
| 1,2,4-TRIMETHYLBENZENE (CAS 95-63-6) | TWA | 125 mg/m3 | |
| BENZENE,1-METHYLETHYL- (CAS 98-82-8) | TWA | 25 ppm 245 mg/m3 | |
| QUARTZ (CAS 14808-60-7) | TWA | 50 ppm 0.05 mg/m3 | Respirable dust. |

Biological limit values**ACGIH Biological Exposure Indices Components**

| Components | Value | Determinant | Specimen | Sampling Time |
|-----------------------------------|---------|----------------------|---------------------|---------------|
| BENZENE, DIMETHYL (CAS 1330-20-7) | 1.5 g/g | Methylhippuric acids | Creatinine in urine | * |

* - For sampling details, please see the source document.

Exposure guidelines**US - California OELs: Skin designation**

BENZENE,1-METHYLETHYL- (CAS 98-82-8) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

BENZENE,1-METHYLETHYL- (CAS 98-82-8) Skin designation applies.

US - Tennessee OELs: Skin designation

BENZENE,1-METHYLETHYL- (CAS 98-82-8) Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

BENZENE,1-METHYLETHYL- (CAS 98-82-8) Can be absorbed through the skin.

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

BENZENE,1-METHYLETHYL- (CAS 98-82-8) 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**

Wear safety glasses; chemical goggles (if splashing is possible).

Skin protection**Hand protection**

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

Other

It is a good industrial hygiene practice to minimize skin contact. Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapor contact.

Respiratory protection

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

Thermal hazards

Not available.

General hygiene considerations

When using, do not eat, drink or smoke. Avoid contact with eyes. Avoid contact with skin. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance

| | |
|-----------------------|----------------|
| Physical state | Solid. |
| Form | Liquid. |
| Color | Not available. |

Odor Not available.

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling range 212 °F (100 °C)

Flash point 100.0 - 120.0 °F (37.8 - 48.9 °C) Cleveland Open Cup

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density > 1 estimated

Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

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

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Density 8.62 lb/gal

Specific gravity 1.08 - 1.2

10. Stability and reactivity

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

Chemical stability Stable at normal conditions.

Possibility of hazardous reactions Hazardous polymerization does not occur.

Conditions to avoid Heat, flames and sparks.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition products Irritants. Carbon oxides. Sulphur oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation May be harmful if inhaled.

Skin contact Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. Causes skin irritation.

Eye contact Causes serious eye irritation.

Ingestion

May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

Symptoms related to the physical, chemical and toxicological characteristics

Not available.

Information on toxicological effects

Acute toxicity

Not classified.

Components

Species

Test Results

1,2,4-TRIMETHYLBENZENE (CAS 95-63-6)

Acute

Dermal

LD50

Rabbit

> 3160 mg/kg

Oral

LD50

Rat

6 g/kg

BENZENE, DIMETHYL (CAS 1330-20-7)

Acute

Dermal

LD50

Rabbit

> 43 g/kg

Inhalation

LC50

Rat

6350 mg/l, 4 Hours

Oral

LD50

Rat

3523 - 8600 mg/kg

BENZENE,1-METHYLETHYL- (CAS 98-82-8)

Acute

Inhalation

LC50

Rat

8000 ppm, 4 Hours

Oral

LD50

Rat

1400 mg/kg

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

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization

Not available.

Skin sensitization

Not a skin sensitizer.

Germ cell mutagenicity

May cause genetic defects.

Carcinogenicity

May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

ASPHALT, OXIDIZED (CAS 64742-93-4)

2A Probably carcinogenic to humans.

BENZENE, DIMETHYL (CAS 1330-20-7)

3 Not classifiable as to carcinogenicity to humans.

BENZENE,1-METHYLETHYL- (CAS 98-82-8)

2B Possibly carcinogenic to humans.

QUARTZ (CAS 14808-60-7)

1 Carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

QUARTZ (CAS 14808-60-7)

Known To Be Human Carcinogen.

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

Not regulated.

Reproductive toxicity

Suspected of damaging fertility or the unborn child.

Specific target organ toxicity - single exposure

Central nervous system. May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure by inhalation.

Aspiration hazard

Not classified.

Chronic effects Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity Not expected to be harmful to aquatic organisms.

| Product | | Species | Test Results |
|--------------------------------------|------|---|------------------------------------|
| BH5350 | | | |
| Aquatic | | | |
| Crustacea | EC50 | Daphnia | 1865.4321 mg/l, 48 hours estimated |
| Fish | LC50 | Fish | 85.2245 mg/l, 96 hours estimated |
| Components | | Species | Test Results |
| 1,2,4-TRIMETHYLBENZENE (CAS 95-63-6) | | | |
| Aquatic | | | |
| Fish | LC50 | Fathead minnow (Pimephales promelas) | 7.19 - 8.28 mg/l, 96 hours |
| BENZENE, DIMETHYL (CAS 1330-20-7) | | | |
| Aquatic | | | |
| Fish | LC50 | Bluegill (Lepomis macrochirus) | 7.711 - 9.591 mg/l, 96 hours |
| BENZENE,1-METHYLETHYL- (CAS 98-82-8) | | | |
| Aquatic | | | |
| Crustacea | EC50 | Brine shrimp (Artemia sp.) | 3.55 - 11.29 mg/l, 48 hours |
| Fish | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 2.7 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)

| | |
|------------------------|------------|
| BENZENE, DIMETHYL | 3.12 - 3.2 |
| BENZENE,1-METHYLETHYL- | 3.66 |

Mobility in soil Not available.

Other adverse effects Not available.

13. Disposal considerations

Disposal instructions Dispose of contents/container in accordance with local/regional/national/international regulations. If discarded, this product is considered a RCRA ignitable waste, D001.

Hazardous waste code D001: Waste Flammable material with a flash point <140 F

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

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

14. Transport information

DOT

| | |
|-------------------------------------|--|
| UN number | UN1999 |
| UN proper shipping name | Tars, liquid |
| Transport hazard class(es) | |
| Class | Combustible Liquid |
| Subsidiary risk | - |
| Label(s) | 3 |
| Packing group | III |
| Environmental hazards | |
| Marine pollutant | No |
| Special precautions for user | If shipped by ground in quantities LESS than 119 gallons (450 L): Not regulated as a hazardous material. |
| Special provisions | B1, B13, IB3, T1, TP3 |
| Packaging exceptions | 150 |
| Packaging non bulk | 203 |

| | |
|-------------------------------------|----------------------------|
| Packaging bulk | 242 |
| IATA | |
| UN number | UN1999 |
| UN proper shipping name | Tars, liquid |
| Transport hazard class(es) | |
| Class | 3 |
| Subsidiary risk | - |
| Packing group | III |
| Environmental hazards | No. |
| ERG Code | 3L |
| Special precautions for user | Not available. |
| Other information | |
| Passenger and cargo aircraft | Allowed with restrictions. |
| Cargo aircraft only | Allowed with restrictions. |

| | |
|-------------------------------------|----------------|
| IMDG | |
| UN number | UN1999 |
| UN proper shipping name | Tars, liquid |
| Transport hazard class(es) | |
| Class | 3 |
| Subsidiary risk | - |
| Packing group | III |
| Environmental hazards | |
| Marine pollutant | No. |
| EmS | F-E, S-E |
| Special precautions for user | Not available. |

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

IATA; IMDG



15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200.
 CERCLA/SARA Hazardous Substances - Not applicable.

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

BENZENE, DIMETHYL (CAS 1330-20-7) Listed.

BENZENE,1-METHYLETHYL- (CAS 98-82-8) Listed.

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

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Yes
Hazardous chemical

SARA 313 (TRI reporting)

| Chemical name | CAS number | % by wt. |
|------------------------|------------|----------|
| 1,2,4-TRIMETHYLBENZENE | 95-63-6 | 7.93 |

Other federal regulations

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

BENZENE, DIMETHYL (CAS 1330-20-7)
BENZENE,1-METHYLETHYL- (CAS 98-82-8)

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

BENZENE,1-METHYLETHYL- (CAS 98-82-8) Listed: April 6, 2010
QUARTZ (CAS 14808-60-7) Listed: October 1, 1988

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

1,2,4-TRIMETHYLBENZENE (CAS 95-63-6)
BENZENE, DIMETHYL (CAS 1330-20-7)
BENZENE,1-METHYLETHYL- (CAS 98-82-8)
QUARTZ (CAS 14808-60-7)
SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM. (CAS 64742-95-6)

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) | No |
| Canada | Non-Domestic Substances List (NDSL) | Yes |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No |
| 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) | 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 12-17-2014
Revision date 04-06-2018
Version # 04

Further information

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

NFPA ratings

Health: 2

Flammability: 2

Instability: 0

References

ACGIH

EPA: AQUIRE database

NLM: Hazardous Substances Data Base

US. IARC Monographs on Occupational Exposures to Chemical Agents

HSDB® - Hazardous Substances Data Bank

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 in the sheet was written based on the best knowledge and experience currently available. 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.

Revision information

This document has undergone significant changes and should be reviewed in its entirety