1. Identification

Product identifier: BH5510
Other means of identification: Not available.
Recommended use: Not available.
Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer
Ergon Armor
Division
Kansas City
Address
450 Funston Drive
Kansas City, KS 66115
Contact Name
Mary Ellen Snow
E-Mail
mary.snow@ergon.com
Hours of Operation
08:00 AM - 05:00 PM (US Central Standard Time)

1.800.222.7122
CHEMTREC
1.800.424.9300

2. Hazard(s) identification

Physical hazards: Flammable liquids Category 3
Health hazards: Not classified.
Environmental hazards: Not classified.
OSHA defined hazards: Not classified.

Label elements

Signal word: Warning
Hazard statement: Flammable liquid and vapor.
Response: In case of fire: Use CO2 for extinction.
Storage: Store in a well-ventilated place. Keep cool.
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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASPHALT, OXIDIZED</td>
<td></td>
<td>64742-93-4</td>
<td>30 - 50</td>
</tr>
<tr>
<td>PROPRIETARY INGREDIENTS</td>
<td></td>
<td>N/A</td>
<td>30 - 50</td>
</tr>
<tr>
<td>STODDARD SOLVENT</td>
<td></td>
<td>8052-41-3</td>
<td>20 - 35</td>
</tr>
<tr>
<td>QUARTZ</td>
<td></td>
<td>14808-60-7</td>
<td>&lt; 1</td>
</tr>
</tbody>
</table>
4. First-aid measures

**Inhalation**
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. 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 symptoms occur.

**Skin contact**
Wash off with soap and plenty of water. For minor skin contact, avoid spreading material on unaffected skin. 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. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

**Ingestion**
Rinse mouth thoroughly. 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. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Aspiration may cause pulmonary edema and pneumonitis. If ingestion of a large amount does occur, call a poison control center immediately.

**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. Symptoms may be delayed.

**General information**
IF exposed or concerned: Get medical advice/attention. Wash contaminated clothing before reuse.

5. Fire-fighting measures

**Suitable extinguishing media**
Foam. Dry powder. Carbon dioxide (CO2). Extinguish with water fog.

**Unsuitable extinguishing media**
Do not use water jet as an extinguisher, as this will spread the fire.

**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. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Some of these materials, if spilled, may evaporate leaving a flammable residue. Water runoff can cause environmental damage.

**Specific methods**
In the event of fire, cool tanks with water spray. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
Remove sources of ignition. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. 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**
Dike far ahead of spill for later disposal. Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain. Collect spillage. Prevent product from entering drains.

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

7. Handling and storage

**Precautions for safe 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. Do not breathe 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 thoroughly after handling. Do not empty into drains.

**Conditions for safe storage, including any incompatibilities**
The pressure in sealed containers can increase under the influence of heat. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a well-ventilated place. Keep container tightly closed. 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)**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>STODDARD SOLVENT (CAS 8052-41-3)</td>
<td>PEL</td>
<td>2900 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>500 ppm</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUARTZ (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.3 mg/m³</td>
<td>Total dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.1 mg/m³</td>
<td>Respirable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.4 millions of particle</td>
<td>Respirable.</td>
</tr>
</tbody>
</table>

**US. ACGIH Threshold Limit Values**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUARTZ (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.025 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>STODDARD SOLVENT (CAS 8052-41-3)</td>
<td>TWA</td>
<td>100 ppm</td>
<td></td>
</tr>
</tbody>
</table>

**U.S. - NIOSH**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASPHALT, OXIDIZED (CAS 64742-93-4)</td>
<td>REL</td>
<td>5 mg/m³</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUARTZ (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.05 mg/m³</td>
<td>Respirable dust.</td>
</tr>
<tr>
<td>STODDARD SOLVENT (CAS 8052-41-3)</td>
<td>Ceiling</td>
<td>1800 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>350 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

**Biological limit values**

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

**Appropriate 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. Ensure adequate ventilation, especially in confined areas.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

Chemical goggles are recommended.

**Hand protection**

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

**Other**

Wear appropriate chemical resistant clothing. Chemical resistant gloves.

**Respiratory protection**

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

**Skin protection**

Not available.

**Thermal hazards**

Not available.

**General hygiene considerations**

When using do not smoke. 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**

Viscous liquid

**Physical state**

Liquid.

**Form**

Liquid.

**Color**

Brown to Black

**Odor**

Mild Petroleum Odor

**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 - 140.0 °F (37.8 - 60.0 °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
4 hPa estimated

Vapor density
> 1

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
8.42 lb/gal

Flammability class
Class II

Specific gravity
1.01

VOC (Weight %)
< 350 g/l

10. Stability and reactivity
Reactivity
Not available.

Chemical stability
Stable under normal temperature 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. Toxic gas.

11. Toxicological information
Information on likely routes of exposure

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

Inhalation
May cause irritation to the respiratory system. However, this product does not currently meet the criteria for classification.

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

Eye contact
Causes eye irritation.

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

Information on toxicological effects

Acute toxicity
Not classified.

Skin corrosion/irritation
May cause defatting of the skin, but is neither an irritant nor a sensitizer.

Serious eye damage/eye irritation
Not classified. May be irritating to eyes.
Respiratory or skin sensitization
- Respiratory sensitization: Not available.
- Skin sensitization: Irritating to skin.

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. This product contains crystalline silica. Silica is a known carcinogen; however in this encapsulated form the normal routes of exposure are unavailable.

IARC Monographs. Overall Evaluation of Carcinogenicity
- ASPHALT, OXIDIZED (CAS 64742-93-4) 2A Probably carcinogenic to humans.
- QUARTZ (CAS 14808-60-7) 1 Carcinogenic to humans.
- STODDARD SOLVENT (CAS 8052-41-3) 3 Not classifiable as to carcinogenicity 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 listed.

Reproductive toxicity
- Based on available data, the classification criteria are not met.

Specific target organ toxicity
- Single exposure: Not available.
- Repeated exposure: Not available.

Aspiration hazard
- Not classified.

Chronic effects
- Not expected to be hazardous by OSHA criteria.

Further information
- Symptoms may be delayed.

12. Ecological information

Ecotoxicity
- Components of this product are hazardous to aquatic life. Accumulation in aquatic organisms is expected. Not expected to be harmful to aquatic organisms.

Persistence and degradability
- Not available.

Bioaccumulative potential
- Not available.

- Partition coefficient n-octanol / water (log Kow): STODDARD SOLVENT 3.16 - 7.15

Mobility in soil
- Not available.

13. Disposal considerations

Disposal instructions
- Contract with a disposal operator licensed by the Law on Disposal and Cleaning. Dispose of this material and its container to hazardous or special waste collection point. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose of contents/container in accordance with local/regional/national/international regulations. Dispose in accordance with all applicable regulations.

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
- Offer rinsed packaging material to local recycling facilities.

14. Transport information

DOT
- UN number: UN1999
- UN proper shipping name: Tars, liquid
- Transport hazard class(es): Combustible Liquid

Class
- 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.
  Cargo aircraft only Allowed.

IMDG
UN number UN1999
UN proper shipping name Tars, liquid
Transport hazard class(es)
  Class 3
  Subsidiary risk -
  Packing group III
Environmental hazards No.
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.

DOT

Further information If shipped by ground in quantities LESS than 119 gallons (450 L): Not regulated as a hazardous material. If shipped by vessel in quantities less than 7.9 gallons (30 L), IMDG 2.3.2.5 exception applies: Not regulated as a hazardous material.

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)  
Not 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 - No
- Delayed Hazard - No
- Fire Hazard - Yes
- Pressure Hazard - No
- Reactivity Hazard - No

SARA 302 Extremely hazardous substance  
Not listed.

SARA 311/312  
Hazardous chemical  
No

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  
QUARTZ (CAS 14808-60-7)  
STODDARD SOLVENT (CAS 8052-41-3)

US. New Jersey Worker and Community Right-to-Know Act  
Not regulated.

US. Pennsylvania RTK - Hazardous Substances  
QUARTZ (CAS 14808-60-7)  
STODDARD SOLVENT (CAS 8052-41-3)

US. Rhode Island RTK  
Not regulated.

US. California Proposition 65  
US - California Proposition 65 - CRT: Listed date/Carcinogenic substance  
QUARTZ (CAS 14808-60-7)  
Listed: October 1, 1988

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 (NDSSL)  
  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
- 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  
06-05-2014
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
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

This safety data sheet was prepared in accordance with the Safety Data Sheet for Chemical Products (JIS Z 7250:2005). Additional information is given in the Material Safety Data Sheet. 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.