Material Safety Data Sheet

Section 1. General Information

Product name: Farbertite
HMIS RATING: 2, 1, 0, Personal Protection: Depends upon conditions
Synonym: Coal tar pitch emulsion
Chemical Family: Tar pitch – inorganic solids – water
Manufacturer: IPA Systems, Inc.
2745 North Amber Street, Philadelphia, Pa. 19134
Phone: 800-523-3834 • 215-425-6607
Fax: 215-425-6234
E-mail: info@ipasystems.com
Website: www.ipasystems.com
Emergency Phone Number - Chemtrec: 800-424-9300

Section 2. Hazardous Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>C.A.S. No.</th>
<th>Percent</th>
<th>Approx. TWA</th>
<th>OSHA–PEL Ceiling</th>
<th>ACGIH TLV TWA</th>
<th>ACGIH TLV Ceiling</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Coal tar pitch, high temp, including:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Acenaphthene</td>
<td>83-32-9</td>
<td>NE</td>
<td>NE</td>
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<tr>
<td>Acenaphthylene</td>
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<td>NE</td>
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<td>Anthracene</td>
<td>120-12-7</td>
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<tr>
<td>Benzo(a)anthracene</td>
<td>56-55-3</td>
<td>NE</td>
<td>NE</td>
<td>A2</td>
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<td>NE</td>
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<tr>
<td>Benzo(a)pyrene</td>
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<td>0.2 mg/m³*</td>
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<tr>
<td>Benzo(b)fluoranthene</td>
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<tr>
<td>Benzo(ghi)perylene</td>
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<td>Carbazole</td>
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<td>Chrysene</td>
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<tr>
<td>Dibenz(a,h)anthracene</td>
<td>53-70-3</td>
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<td>Dibenzofuran</td>
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<td>Fluoranthene</td>
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<td>Fluorene</td>
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<td>Indene</td>
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<td>10 ppm</td>
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<tr>
<td>Indeno(1,2,3-cd)pyrene</td>
<td>193-39-5</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
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<td>1-Methylnaphthalene</td>
<td>90-12-0</td>
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<td>NE</td>
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<td>2-Methylnaphthalene</td>
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<td>Naphthalene</td>
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<td>15 ppm</td>
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<td>Phenanthrene</td>
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<td>0.2 mg/m³*</td>
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<tr>
<td>Pyrene</td>
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<td>NE</td>
<td>0.2 mg/m³*</td>
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<td>NE</td>
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<tr>
<td>2. Kaolin</td>
<td>1332-58-7</td>
<td>15</td>
<td>5 mg/m³**</td>
<td>NE</td>
<td>2 mg/m³ RF</td>
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<tr>
<td>3. Sand (Quartz)</td>
<td>14808-60-7</td>
<td>2</td>
<td>**</td>
<td>NE</td>
<td>0.1 mg/m³ RF</td>
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<tr>
<td>4. Water</td>
<td>Not Req’d.</td>
<td>48</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
</tbody>
</table>

(continued on next page)
Material Safety Data Sheet

Section 2. Hazardous Ingredients
(continued from previous page)

Notes on exposure limits:
RF = Respirable Fraction
TD = Total Dust
AF = Asbestos Free
* For benzene- (or cyclohexane-) soluble fraction of coal tar pitch volatiles
** PEL for crystalline quartz (respirable): 10 mg/m$^3$/ (%SiO$_2$ + 2)
PEL for quartz (total dust): 30 mg/m$^3$/ (%SiO$_2$ + 2)

Section 3. Physical Data

Boiling Point: 212°F (100°C) Specific Gravity: (H$_2$O = 1): 1.20
Vapor Pressure (mm Hg.): 17 mm Hg @ 20°C (water) Percent Volatile by Volume: 48 (est.)
Vapor Density (Air = 1): Above 1.0
Solubility in Water: Negligible
Appearance and Odor: Black liquid, mild odor

Section 4. Fire and Explosion Hazard Data

Flash Point: None
Autoignition Temperature: None
Flammable Limits: LEL = NA UEL = NA
Extinguishing Media: Material will not burn unless water is first evaporated. If engulfed in a fire, use extinguishant suitable for the primary fuel.
Special Fire Fighting Procedures: Wear respirator (pressure demand, self-contained breathing apparatus, MSHA/NIOSH-approved) and full protective gear for working fires. Cool exposed containers with water spray.
Unusual Fire and Explosion Hazards: Combustion products can include oxides of nitrogen, carbon and possibly sulphur.
Section 5. Health Hazard Data

Hazardous Material Identification System (HMIS) Classification:
- Health: 2
- Flammability: 1
- Reactivity: 0
- Personal Protection: Depends upon conditions

OSHA PEL: See Section 2. Hazardous Ingredients
ACGIH TLV: See Section 2. Hazardous Ingredients

Carcinogen – NTP Program: Yes
Carcinogen – IARC Program: Yes

Coal tar pitch has been determined by IARC to be a human carcinogen. Coal tar pitch and several of its specific ingredients, including benzo(a)pyrene, have been determined by NTP to cause cancer in experimental animals.

Symptoms of Exposure:
- Ingestion: May cause gastrointestinal irritation or distress if swallowed.
- Skin: Pitch portion of emulsion can cause skin irritation and dermatitis, including acne. Coal tar pitch is a phototoxic substance which, in the presence of ultraviolet light (sunlight), can cause a skin reaction similar to an exaggerated sunburn, frequently causing blisters. However, emulsion form of this material reduces the risk of direct contact with pitch.
- Eye contact: Can cause eye irritation or abrasion.
- Inhalation: Material is not an inhalation hazard unless spray mist is present; in which case, it can irritate the nose and throat.
- Delayed effects: Long-term over-exposure to coal tar pitch can affect skin pigmentation. It can cause growths on the skin or skin cancer. It may cause cancer of the lungs, kidneys or bladder.

Medical Conditions Aggravated by Exposure: NA

Routes of Entry: Ingestion, Skin, Eye Contact, Inhalation of spray mist

Emergency and First Aid Procedures:
- Inhalation: If mist particles clog airways, remove them by blowing nose, using vegetable oil to soften dried particles if necessary.
- Swallowing: Consult a physician or poison control center at once for instructions.
- Eye Contact: Immediately flush well with large amounts of water for 15 minutes. Seek medical attention if irritation persists.
- Skin Contact: Remove contaminated clothing. If material adheres to skin, remove it with vegetable oil, then wash thoroughly with soap and water. Hydrocortisone cream may be used for relief of skin irritation. Seek medical attention if irritation persists.

Section 6. Reactivity Data

Stability: Stable
Conditions to Avoid: None
Incompatibility (Materials to Avoid Contact): Strong oxidizers
Hazardous Decomposition or By-Products: No decomposition in normal handling.
Hazardous Polymerization: Will not occur.
Section 7. Procedures for Safe Handling and Use

Spill Response: Follow all precautions given in Section 8 and wear permeation-resistant, elastomeric boots or overshoes. If molten liquid is spilled indoors, ventilate spill area. Stop source of spill or leak if possible. Contain spills by diking with sand, earth, ash or other inert material in order to prevent spillage from entering sewers or open bodies of water. (Significant soil penetration is unlikely because material will solidify at or near soil surface.)

Allow hot material to cool and solidify, then transfer spillage to labeled containers for recovery or disposal.

Report spill immediately to National Response Center if amount released to the environment exceeds 210 pounds, which is based upon the concentration of benzo(b)fluoranthene (RQ – 1 lb.) present in this material and listed in 40 CFR Table 302.4.

Waste Disposal Method: Dispose of waste at a permitted facility according to federal, state and local regulations.

Empty containers may contain residues that could burn or produce harmful vapors if heated or ignited. Do not weld on or apply heat or flame to container. Follow federal, state and local regulations in disposing of containers.

Section 8. Control Measures

Eye Protection: Wear splash goggles (ANSI Z87.1a-1991) when pouring or transferring this material. Do not wear contact lenses.

Respiratory Protection: Not required unless spray mist is present. To prevent overexposure to spray mist, wear respirator (MSHA/NIOSH approved) equipped with dust-mist filter.

Skin Protection: Avoid skin contact by wearing elastomeric gloves when handling.

Ventilation: No special ventilation measures are required unless spray mist is present, in which case, provide local or general exhaust ventilation.

Other Protection: Eyewash station and emergency shower (ANSI Z358.1-1990) should be readily available.

Section 9. Special Precautions

Hygienic Practices in Handling and Storage: Wash hands with soap and water after handling and especially before eating or smoking. Wash contaminated clothing before reuse.

Precautions for Repair and Maintenance of Contaminated Equipment: NA

Other Precautions: Store and handle separately from strong oxidizers.
Section 10. Regulatory Information

The following information applies to ground shipments within North America, but may not apply otherwise.

Packaged shipments – Bill of Lading Descriptions:

- Up to 5 gallons:
  - Not D.O.T.-regulated.

- Drums:
  - RQ, Other regulated substances, liquid, NOS, 9, NA3082, PG III
  - (Tar pitch / CONTAINS benzo(b)flouranthene, benzo(a)pyrene)

All ingredients of this product are listed on the TSCA Inventory in accordance with Section 8(b).

The following ingredients are reportable under SARA Section 313 (40 CFR Part 372, Subpart D):

<table>
<thead>
<tr>
<th>Name</th>
<th>C.A.S. Number</th>
<th>Concentration, wt. pct.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polycyclic Aromatic Compound Category</td>
<td>None</td>
<td>1.0</td>
</tr>
</tbody>
</table>