SAFETY DATA SHEET

1. Identification

Material name: THERMASTIC 100 PALLET
Material: 371850 495

Recommended use and restriction on use
  Recommended use: Adhesive
  Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information
Tremco U.S. Roofing
3735 Green Road
Beachwood OH 44122
US

Contact person: EH&S Department
Telephone: 216-292-5000
Emergency telephone number: 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Health Hazards
  Carcinogenicity
    Carcinogenicity Category 1A

Unknown toxicity - Health
  Acute toxicity, oral 0 %
  Acute toxicity, dermal 0 %
  Acute toxicity, inhalation, vapor 100 %
  Acute toxicity, inhalation, dust or mist 99.93 %

Unknown toxicity - Environment
  Acute hazards to the aquatic environment 99.09 %
  Chronic hazards to the aquatic environment 100 %

Label Elements

Hazard Symbol:

Signal Word: Danger
Hazard Statement: May cause cancer.
Precautionary Statement:
Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

Response: If exposed or concerned: Get medical advice/attention.

Storage: Store locked up.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards which do not result in GHS classification: None.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>CAS number</th>
<th>Content in percent (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>8052-42-4</td>
<td>60 - 100%</td>
</tr>
<tr>
<td>Residual oils (petroleum)</td>
<td>64742-62-7</td>
<td>5 - 10%</td>
</tr>
</tbody>
</table>

*All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Ingestion: Call a POISON CENTER/doctor/.../if you feel unwell. Rinse mouth.

Inhalation: Move to fresh air.

Skin Contact: Wash skin thoroughly with soap and water. Get medical attention if symptoms occur.

Eye contact: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/attention.

Most important symptoms/effects, acute and delayed

Symptoms: May cause skin and eye irritation.

Indication of immediate medical attention and special treatment needed

Treatment: Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: 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: No data available.

Methods and material for containment and cleaning up: Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

Notification Procedures: In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling: Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Use mechanical ventilation in case of handling which causes formation of dust.

Conditions for safe storage, including any incompatibilities: Store locked up.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt - Inhalable fraction. - as benzene solubles</td>
<td>TWA</td>
<td>0.5 mg/m3</td>
<td>US. ACGIH Threshold Limit Values (2011)</td>
</tr>
<tr>
<td>Residual oils (petroleum) - Inhalable fraction.</td>
<td>TWA</td>
<td>5 mg/m3</td>
<td>US. ACGIH Threshold Limit Values (03 2014)</td>
</tr>
</tbody>
</table>
### Chemical name

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt - Aerosol, inhalable. - as benzene solubles</td>
<td>TWA</td>
<td>0.5 mg/m³</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
<tr>
<td>Asphalt - Inhalable fraction. - as benzene solubles</td>
<td>TWAEV</td>
<td>0.5 mg/m³</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
</tr>
<tr>
<td>Asphalt - Fume.</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)</td>
</tr>
<tr>
<td>Residual oils (petroleum) - Mist.</td>
<td>TWA</td>
<td>1 mg/m³</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (05 2013)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>0.2 mg/m³</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (05 2013)</td>
</tr>
</tbody>
</table>

**Appropriate Engineering Controls**

Mechanical ventilation or local exhaust ventilation may be required. Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of dust.

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

**General information:**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory and eye protection may be needed in special circumstances, such as poorly ventilated spaces, heating, evaporation of liquids from large surfaces, spraying of mists, mechanical generation of dusts, drying of solids, etc.

**Eye/face protection:**

Wear safety glasses with side shields (or goggles).

**Skin Protection**

**Hand Protection:**

Use suitable protective gloves if risk of skin contact.

**Other:**

Wear suitable protective clothing.

**Respiratory Protection:**

In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

**Hygiene measures:**

Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties
Appearance

Physical state: solid
Form: solid
Color: Black
Odor: Aromatic
Odor threshold: No data available.
pH: No data available.
Melting point/freezing point: No data available.
Initial boiling point and boiling range: No data available.
Flash Point: No data available.
Evaporation rate: Slower than Ether
Flammability (solid, gas): No
Upper/lower limit on flammability or explosive limits
  Flammability limit - upper (%): No data available.
  Flammability limit - lower (%): No data available.
  Explosive limit - upper (%): No data available.
  Explosive limit - lower (%): No data available.
Vapor pressure: No data available.
Vapor density: Vapors are heavier than air and may travel along the floor and in the bottom of containers.
Relative density: 0.95
Solubility(ies)
  Solubility in water: Insoluble in water
  Solubility (other): No data available.
Partition coefficient (n-octanol/water): No data available.
Auto-ignition temperature: No data available.
Decomposition temperature: No data available.
Viscosity: No data available.

10. Stability and reactivity

Reactivity: No data available.
Chemical Stability: Material is stable under normal conditions.
Possibility of Hazardous Reactions: No data available.
Conditions to Avoid: Avoid heat or contamination.
Incompatible Materials: Avoid contact with oxidizing agents (e.g. nitric acid, peroxides and chromates).
Hazardous Decomposition Products: Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure
Ingestion: May be ingested by accident. Ingestion may cause irritation and malaise.
Inhalation: In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.

Skin Contact: May be harmful in contact with skin.

Eye contact: Eye contact is possible and should be avoided.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

- Oral
  - Product: ATEmix: 73,699.57 mg/kg

- Dermal
  - Product: ATEmix: 2,428.56 mg/kg

- Inhalation
  - Product: No data available.

Repeated dose toxicity
- Product: No data available.

Skin Corrosion/Irritation
- Product: No data available.

Serious Eye Damage/Eye Irritation
- Product: No data available.

- Specified substance(s):
  - Asphalt
    - in vivo (Rabbit, 24 hrs): Not irritating
  - Residual oils (petroleum)
    - in vivo (Rabbit, 24 hrs): Not irritating

Respiratory or Skin Sensitization
- Product: No data available.

Carcinogenicity
- Product: No data available.
IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

- Asphalt: Overall evaluation: Possibly carcinogenic to humans.
- Residual oils (petroleum): Overall evaluation: Not classifiable as to carcinogenicity to humans. Overall evaluation: Carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens:
- Residual oils (petroleum): Known To Be Human Carcinogen.

- No carcinogenic components identified

Germ Cell Mutagenicity

- In vitro
  - Product: No data available.
- In vivo
  - Product: No data available.

Reproductive toxicity
- Product: No data available.

Specific Target Organ Toxicity - Single Exposure
- Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure
- Product: No data available.

Aspiration Hazard
- Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

- Fish
  - Product: No data available.

Aquatic Invertebrates
- Product: No data available.
Chronic hazards to the aquatic environment:

**Fish**
Product: No data available.

*Specified substance(s):*
- Asphalt: NOAEL (Oncorhynchus mykiss, 28 d): >= 1,000 mg/l interpreted
- Residual oils (petroleum): NOAEL (Oncorhynchus mykiss, 14 d): >= 1,000 mg/l QSAR

**Aquatic Invertebrates**
Product: No data available.

**Toxicity to Aquatic Plants**
Product: No data available.

**Persistence and Degradability**

**Biodegradation**
Product: No data available.

**BOD/COD Ratio**
Product: No data available.

**Bioaccumulative Potential**

**Bioconcentration Factor (BCF)**
Product: No data available.

**Partition Coefficient n-octanol / water (log Kow)**
Product: No data available.

**Mobility in Soil:**
No data available.

**Other Adverse Effects:**
No data available.

**13. Disposal considerations**

**Disposal instructions:** Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Contaminated Packaging:**
No data available.

**14. Transport information**

**TDG:**
Not Regulated
CFR / DOT:
Not Regulated

IMDG:
Not Regulated

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>100 lbs.</td>
</tr>
</tbody>
</table>

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Delayed (Chronic) Health Hazard

SARA 302 Extremely Hazardous Substance
None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>100 lbs.</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazardous Chemical

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Threshold Planning Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>500 lbs</td>
</tr>
<tr>
<td>Residual oils (petroleum)</td>
<td>500 lbs</td>
</tr>
</tbody>
</table>

SARA 313 (TRI Reporting)
None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)
None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):
None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65
This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.
US. New Jersey Worker and Community Right-to-Know Act
**Chemical Identity**
Asphalt

US. Massachusetts RTK - Substance List
**Chemical Identity**
Asphalt

US. Pennsylvania RTK - Hazardous Substances
**Chemical Identity**
Asphalt

US. Rhode Island RTK
No ingredient regulated by RI Right-to-Know Law present.

Other Regulations:

- **Regulatory VOC (less water and exempt solvent):** 1 g/l
- **VOC Method 310:** 0.07%

Inventory Status:
- **Australia AICS:** One or more components in this product are not listed on or exempt from the Inventory.
- **Canada DSL Inventory List:** All components in this product are listed on or exempt from the Inventory.
- **EINECS, ELINCS or NLP:** One or more components in this product are not listed on or exempt from the Inventory.
- **Japan (ENCS) List:** One or more components in this product are not listed on or exempt from the Inventory.
- **China Inv. Existing Chemical Substances:** One or more components in this product are not listed on or exempt from the Inventory.
- **Korea Existing Chemicals Inv. (KECI):** One or more components in this product are not listed on or exempt from the Inventory.
- **Canada NDSL Inventory:** One or more components in this product are not listed on or exempt from the Inventory.
- **Philippines PICCS:** One or more components in this product are not listed on or exempt from the Inventory.
- **US TSCA Inventory:** All components in this product are listed on or exempt from the Inventory.
- **New Zealand Inventory of Chemicals:** One or more components in this product are not listed on or exempt from the Inventory.
Japan ISHL Listing: One or more components in this product are not listed on or exempt from the Inventory.

Japan Pharmacopoeia Listing: One or more components in this product are not listed on or exempt from the Inventory.

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

Revision Date: 08/13/2015
Version #: 1.0
Further Information: No data available.
Disclaimer: For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.