SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
- Product form: Mixture
- Product name: Tropical - #509 All Weather Modified Mastic
- Product code: TRO-509
- Formula: 700-TRO-509

1.2. Relevant identified uses of the substance or mixture and uses advised against
- Use of the substance/mixture: Roofing/Waterproofing

1.3. Details of the supplier of the safety data sheet
- TROPICAL ROOFING PRODUCTS
  1904 S.W. 31ST Ave.
  HALLANDALE, FL 33009 - UNITED STATES
  T 954-983-3434
  technical@tropicalroofingproducts.com - www.tropicalroofingproducts.com

1.4. Emergency telephone number
- Emergency number: 800-424-9300
  Chemtrec

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
- GHS-US classification:
  - Flam. Liq. 2: H225
  - Muta. 1B: H340
  - Carc. 1B: H350
  - STOT RE 1: H372
- Full text of H-phrases: see section 16

2.2. Label elements
- GHS-US labelling: 0
- Hazard pictograms (GHS-US):
  - GHS02
  - GHS08

- Signal word (GHS-US): Danger
- Hazard statements (GHS-US):
  - H225 - Highly flammable liquid and vapour
  - H340 - May cause genetic defects (Dermal, Inhalation)
  - H350 - May cause cancer (Inhalation, Dermal)
  - H372 - Causes damage to organs (central nervous system, eye, Skin, lung, liver) through prolonged or repeated exposure (Dermal, Inhalation)

- Precautionary statements (GHS-US):
  - P201 - Obtain special instructions before use
  - P202 - Do not handle until all safety precautions have been read and understood
  - P210 - Keep away from open flames. - No smoking
  - P233 - Keep container tightly closed
  - P240 - Ground/bond container and receiving equipment
  - P241 - Use explosion-proof electrical/ventilating/lighting/… equipment
  - P242 - Use only non-sparking tools
  - P243 - Take precautionary measures against static discharge
  - P260 - Do not breathe fume, gas, vapours
  - P264 - Wash hands thoroughly after handling
  - P270 - Do not eat, drink or smoke when using this product
  - P280 - Wear protective gloves, protective clothing
  - P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
  - P308+P313 - If exposed or concerned: Get medical advice/attention
Tropical - #509 All Weather Modified Mastic
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P314 - Get medical advice/attention if you feel unwell
P370+P378 - In case of fire: Use carbon dioxide (CO2), foam, dry extinguishing powder to
 extinguish
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or
collection site except for empty clean containers which can be disposed of as non-hazardous
waste

2.3. Other hazards
Other hazards not contributing to the classification : None under normal conditions.

2.4. Unknown acute toxicity (GHS-US) Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance Not applicable
3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>asphaltic bitumen, not cut back</td>
<td>(CAS No) 8052-42-4</td>
<td>60 - 80</td>
<td>Not classified</td>
</tr>
<tr>
<td>kaolin</td>
<td>(CAS No) 1332-58-7</td>
<td>15 - 30</td>
<td>Not classified</td>
</tr>
<tr>
<td>Stoddard solvent</td>
<td>(CAS No) 8052-41-3</td>
<td>20 - 25</td>
<td>Muta. 1B, H340 Carc. 1B, H350 STOT RE 1, H372 Asp. Tox. 1, H304</td>
</tr>
<tr>
<td>attapulgite</td>
<td>(CAS No) 12174-11-7</td>
<td>5 - 10</td>
<td>Carc. 2, H351</td>
</tr>
<tr>
<td>cellulose</td>
<td>(CAS No) 9004-34-6</td>
<td>3 - 7</td>
<td>Not classified</td>
</tr>
<tr>
<td>SBR-latex</td>
<td>(CAS No) 9003-55-6</td>
<td></td>
<td>Not classified</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16 *The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

SECTION 4: First aid measures

4.1. Description of first aid measures
First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries : There are potential chronic health effects to consider.
Symptoms/injuries after inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause an allergic skin reaction.
Symptoms/injuries after skin contact : May cause an allergic skin reaction. May cause moderate irritation.
Symptoms/injuries after eye contact : Eye irritation.
Chronic symptoms : ON CONTINUOUS/REPEATED EXPOSURE/CONTACT:

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture
Fire hazard : Combustible liquid.
Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. May form flammable/explosive vapour-air mixture.
Reactivity: Upon combustion: CO and CO2 are formed.

5.3. Advice for firefighters

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Absorb spillage to prevent material damage. Isolate from fire, if possible, without unnecessary risk. No flames, no sparks. Eliminate all sources of ignition. Remove ignition sources.

6.1.1. For non-emergency personnel

Protective equipment: Protective clothing. Gloves.

Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: Equip cleanup crew with proper protection.

Emergency procedures: Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment: Collect spillage.

Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Eliminate all ignition sources if safe to do so. Do not breathe fume, spray, vapours.

Handling temperature: < 110 (≤ 100) °F

Hygiene measures: Do not eat, drink or smoke when using this product. Wash Always wash hands after handling the product, Do not eat, drink or smoke when using this product, Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep only in the original container in a cool, well ventilated place away from: Keep container closed when not in use. Keep container closed when not in use.

Incompatible products: Strong bases. Strong acids.

Incompatible materials: Sources of ignition.

Storage temperature: < 43 °C

Heat and ignition sources: KEEP SUBSTANCE AWAY FROM: ignition sources.

Prohibitions on mixed storage: No data available.

Storage area: Meet the legal requirements.

Special rules on packaging: Keep only in original container. meet the legal requirements. Store in a closed container. correctly labelled.

Packaging materials: No data available.

7.3. Specific end use(s)

No additional information available
SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Material Description</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tropical - #509 All Weather Modified Mastic</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>asphaltic bitumen, not cut back (8052-42-4)</td>
<td>OSHA Not applicable</td>
<td></td>
</tr>
<tr>
<td>attapulgite (12174-11-7)</td>
<td>ACGIH Not applicable</td>
<td>OSHA Not applicable</td>
</tr>
<tr>
<td>cellulose (9004-34-6)</td>
<td>OSHA Not applicable</td>
<td></td>
</tr>
<tr>
<td>kaolin (1332-58-7)</td>
<td>OSHA Not applicable</td>
<td></td>
</tr>
<tr>
<td>SBR-latex (9003-55-8)</td>
<td>ACGIH Not applicable</td>
<td>OSHA Not applicable</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Personal protective equipment: Avoid all unnecessary exposure.

Materials for protective clothing: PICM010.
Hand protection: Wear protective gloves.
Eye protection: Chemical goggles or safety glasses.
Skin and body protection: Wear suitable protective clothing.
Respiratory protection: Wear appropriate mask.
Other information: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>BLACK FIBERED MASTIC.</td>
</tr>
<tr>
<td>Colour</td>
<td>Black</td>
</tr>
<tr>
<td>Odour</td>
<td>Petroleum-like odour</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>&gt; 300 (≤ 450) °F</td>
</tr>
<tr>
<td>Flash point</td>
<td>106 °F</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>0.293 kPa at 20 C</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.02 - 1.12</td>
</tr>
<tr>
<td>Density</td>
<td>8 - 9</td>
</tr>
<tr>
<td>Percent Solids</td>
<td>&gt; 75 %</td>
</tr>
</tbody>
</table>
**Solubility**
- Water: 0 %
- Acetone: ≈ g/100ml
- Organic solvent: 100 %

**Log Pow**
- No data available

**Log Kow**
- No data available

**Viscosity, kinematic**
- No data available

**Viscosity, dynamic**
- No data available

**Explosive properties**
- No data available.

**Oxidising properties**
- No data available.

**Explosive limits**
- No data available.

**VOC content**
- < 250 (≤ 250) g/l

### SECTION 10: Stability and reactivity

**10.1. Reactivity**
Upon combustion: CO and CO2 are formed.

**10.2. Chemical stability**
Not established.

**10.3. Possibility of hazardous reactions**
Not established.

**10.4. Conditions to avoid**
No flames, no sparks. Eliminate all sources of ignition. Direct sunlight. Extremely high or low temperatures.

**10.5. Incompatible materials**
Strong acids. Strong bases.

**10.6. Hazardous decomposition products**

### SECTION 11: Toxicological information

**11.1. Information on toxicological effects**

- **Acute toxicity**
  - Not classified
  - (Lack of data)

  **asphaltic bitumen, not cut back (8052-42-4)**
  - LD50 oral rat: > 2000 mg/kg (Rat)
  - LD50 dermal rabbit: > 2000 mg/kg (Rabbit)

  **cellulose (9004-34-6)**
  - LD50 oral rat: > 5000 mg/kg (Rat)
  - LD50 dermal rabbit: > 2000 mg/kg (Rabbit)
  - LC50 inhalation rat (mg/l): > 6 mg/l/4h (Rat)

- **Skin corrosion/irritation**
  - Not classified

- **Serious eye damage/irritation**
  - Not classified

- **Respiratory or skin sensitisation**
  - Not classified

- **Germ cell mutagenicity**
  - May cause genetic defects (Dermal, Inhalation).

- **Carcinogenicity**
  - May cause cancer (Inhalation, Dermal).

  **asphaltic bitumen, not cut back (8052-42-4)**
  - IARC group: 3 - Not classifiable

  **attapulgite (12174-11-7)**
  - IARC group: 2B - Possibly carcinogenic to humans, 3 - Not classifiable

  **SBR-latex (9003-55-8)**
  - IARC group: 3 - Not classifiable
### Reproductive toxicity
- Not classified

### Specific target organ toxicity (single exposure)
- Not classified

### Specific target organ toxicity (repeated exposure)
- Causes damage to organs (central nervous system, eye, Skin, lung, liver) through prolonged or repeated exposure (Dermal, Inhalation).

### Aspiration hazard
- Not classified

### Potential adverse human health effects and symptoms
- Based on available data, the classification criteria are not met.

#### Symptoms/injuries after inhalation
- May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause an allergic skin reaction.

#### Symptoms/injuries after skin contact
- May cause an allergic skin reaction. May cause moderate irritation.

#### Symptoms/injuries after eye contact
- Eye irritation.

#### Chronic symptoms
- ON CONTINUOUS/REPEATED EXPOSURE/CONTACT:

### SECTION 12: Ecological information

#### 12.1. Toxicity

**asphaltic bitumen, not cut back (8052-42-4)**
- LC50 fish 1: > 1000 mg/l (96 h; Pisces)
- LC50 other aquatic organisms 1: > 1000 mg/l (96 h)
- Threshold limit other aquatic organisms 1: > 1000 mg/l (96 h)

**cellulose (9004-34-6)**
- LC50 fish 1: > 100 mg/l (Pisces)
- EC50 Daphnia 1: > 100 mg/l (Invertebrata)
- Threshold limit algae 1: > 100 mg/l (Algae)

#### 12.2. Persistence and degradability

**asphaltic bitumen, not cut back (8052-42-4)**
- Persistence and degradability: Not established.

**attapulgite (12174-11-7)**
- Persistence and degradability: Biodegradability: not applicable. No (test)data on mobility of the substance available.
- Biochemical oxygen demand (BOD): Not applicable
- Chemical oxygen demand (COD): Not applicable
- ThOD: Not applicable
- BOD (% of ThOD): Not applicable

**cellulose (9004-34-6)**
- Persistence and degradability: Biodegradable in water.

**kaolin (1332-58-7)**
- Persistence and degradability: Biodegradability: not applicable.
- Biochemical oxygen demand (BOD): Not applicable
- Chemical oxygen demand (COD): Not applicable
- ThOD: Not applicable
- BOD (% of ThOD): Not applicable

**SBR-latex (9003-55-8)**
- Persistence and degradability: Biodegradability in water: no data available.

#### 12.3. Bioaccumulative potential

**asphaltic bitumen, not cut back (8052-42-4)**
- Bioaccumulative potential: Not established.
Tropical - #509 All Weather Modified Mastic
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>Substance</th>
<th>Log Pow</th>
<th>Bioaccumulative potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>asphaltic bitumen, not cut back (8052-42-4)</td>
<td>&gt; 6 (Calculated)</td>
<td>Not bioaccumulative.</td>
</tr>
<tr>
<td>attapulgite (12174-11-7)</td>
<td></td>
<td>No bioaccumulation data available.</td>
</tr>
<tr>
<td>cellulose (9004-34-6)</td>
<td></td>
<td>Bioaccumulation: not applicable.</td>
</tr>
<tr>
<td>kaolin (1332-58-7)</td>
<td></td>
<td>No bioaccumulation data available.</td>
</tr>
<tr>
<td>Stoddard solvent (8052-41-3)</td>
<td>3.16-7.06</td>
<td>No bioaccumulation data available.</td>
</tr>
</tbody>
</table>

**12.4. Mobility in soil**
No additional information available

**12.5. Other adverse effects**

Effect on ozone layer : 
Effect on the global warming : No known ecological damage caused by this product.
Other information : Avoid release to the environment.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to Remove waste in accordance with local and/or national regulations.
Additional information : Industrial waste.
Ecology - waste materials : Avoid release to the environment.

**SECTION 14: Transport information**

In accordance with DOT
Transport document description : Combustible Liquid - DOT 49 CFR 173.150 SUB.PAR.F. Unregulated, III
UN-No.(DOT) : Combustible Liquid - DOT 49 CFR 173.150 SUB.PAR.F. Unregulated
Packing group (DOT) : III - Minor Danger
Additional information
Other information : No supplementary information available.

**ADR**
No additional information available

Transport by sea
No additional information available

Air transport
No additional information available

**SECTION 15: Regulatory information**

**15.1. US Federal regulations**

Tropical - #509 All Weather Modified Mastic
Not listed on the United States SARA Section 313

asphaltic bitumen, not cut back (8052-42-4)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
### 15.2. International regulations

**CANADA**
No additional information available

**EU-Regulations**
No additional information available

**Classification according to Regulation (EC) No. 1272/2008 [CLP]**
Not classified

**Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]**
Not classified

#### 15.2.2. National regulations

<table>
<thead>
<tr>
<th>Chemical</th>
<th>U.S. - California - Proposition 65 - Carcinogens List</th>
<th>U.S. - California - Proposition 65 - Developmental Toxicity</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</th>
<th>No significance risk level (NSRL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>attapulgite (12174-11-7)</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No significance risk level (NSRL)</td>
</tr>
<tr>
<td>asphaltic bitumen, not cut back (8052-42-4)</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No significance risk level (NSRL)</td>
</tr>
</tbody>
</table>

### 16. Other information

Other information : None.
Full text of H-phrases:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asp. Tox. 1</td>
<td>Aspiration hazard, Category 1</td>
</tr>
<tr>
<td>Carc. 1B</td>
<td>Carcinogenicity, Category 1B</td>
</tr>
<tr>
<td>Carc. 2</td>
<td>Carcinogenicity, Category 2</td>
</tr>
<tr>
<td>Flam. Liq. 2</td>
<td>Flammable liquids, Category 2</td>
</tr>
<tr>
<td>Muta. 1B</td>
<td>Germ cell mutagenicity, Category 1B</td>
</tr>
<tr>
<td>STOT RE 1</td>
<td>Specific target organ toxicity — Repeated exposure, Category 1</td>
</tr>
<tr>
<td>H225</td>
<td>Highly flammable liquid and vapour</td>
</tr>
<tr>
<td>H304</td>
<td>May be fatal if swallowed and enters airways</td>
</tr>
<tr>
<td>H340</td>
<td>May cause genetic defects</td>
</tr>
<tr>
<td>H350</td>
<td>May cause cancer</td>
</tr>
<tr>
<td>H351</td>
<td>Suspected of causing cancer</td>
</tr>
<tr>
<td>H372</td>
<td>Causes damage to organs through prolonged or repeated exposure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS III Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>2 Moderate Hazard - Temporary or minor injury may occur</td>
</tr>
<tr>
<td>Flammability</td>
<td>2 Moderate Hazard</td>
</tr>
<tr>
<td>Physical</td>
<td>0 Minimal Hazard</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>p</td>
</tr>
</tbody>
</table>

All information contained in this MSDS is based on current technical data believed to be accurate and reliable. Additions of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since these conditions are outside our control, we furnish this MSDS without any express or implied warranties.