1. Identification

1.1. Product identifier
Product Identity: AP-5400 High Solids Silicone Roof Coating
Alternate Names: Armour Proof AP-5400 High Solids Silicone Roof Coating

1.2. Relevant identified uses of the substance or mixture and uses advised against
Intended use: Silicone Coating
Application Method: See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet
Company Name: United Asphalt Company
Address: 237 North Grove Street
City: Berlin, NJ
Postal Code: 08009
Emergency
24 hour Emergency Telephone No.: 800-424-9300
Telephone: 800-843-0317

2. Hazard(s) identification

2.1. Classification of the substance or mixture
Flam. Liq. 4;H226: Combustible liquid.
Skin Irrit. 3;H316: Causes mild skin irritation. (Not adopted by US OSHA)
Eye Irrit. 2;H319: Causes serious eye irritation.
Skin Sens. 1;H317: May cause an allergic skin reaction.
Carc. 2;H351: Suspected of causing cancer.
Repr. 2;H361F: Suspected of damaging fertility.

2.2. Label elements
Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.

- Danger
  H226 Combustible liquid.
H316 Causes mild skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H351Suspected of causing cancer.
H361f Suspected of damaging fertility.

[Prevention]:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from flames / hot surfaces - No smoking.
P235 Keep cool.
P240 Ground / bond container and receiving equipment.
P241 Use explosion-proof electrical / ventilating / light / equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust / fume / gas / mist / vapors / spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves / eye protection / face protection.

[Response]:
P302+352 IF ON SKIN: Wash with plenty of soap and water.
P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P308+313 IF exposed or concerned: Get medical advice / attention.
P314 Get Medical advice / attention if you feel unwell.
P321 Specific treatment (see information on this label).
P333+313 If skin irritation or a rash occurs: Get medical advice / attention.
P337+313 If eye irritation persists: Get medical advice / attention.
P363 Wash contaminated clothing before reuse.
P370+378 In case of fire: Use extinguishing media listed in section 5 of SDS for extinction.

[Storage]:
P403+233 Store in a well ventilated place. Keep container tightly closed.
P405 Store locked up.
3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

<table>
<thead>
<tr>
<th>Ingredient/Chemical Designations</th>
<th>Weight %</th>
<th>GHS Classification</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethylsiloxane</td>
<td>10 - 25</td>
<td>Aquatic Chronic 2;H411</td>
<td>[1]</td>
</tr>
<tr>
<td>CAS Number: 0063148-62-9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methyltris(methylethylketoximino)silane</td>
<td>1.0 - 10</td>
<td>Eye Irrit. 2;H319</td>
<td>[1]</td>
</tr>
<tr>
<td>CAS Number: 0022984-54-9</td>
<td></td>
<td>Skin Irrit. 2;H315</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin Sens. 1;H317</td>
<td></td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>1.0 - 10</td>
<td>Not Classified</td>
<td>[1][2]</td>
</tr>
<tr>
<td>CAS Number: 0013463-67-7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cristobalite</td>
<td>1.0 - 10</td>
<td>STOT RE 1;H372</td>
<td>[1]</td>
</tr>
<tr>
<td>CAS Number: 0014464-46-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-Butanone oxime</td>
<td>1.0 - 10</td>
<td>Carc. 2;H351</td>
<td>[1]</td>
</tr>
<tr>
<td>CAS Number: 0000096-29-7</td>
<td></td>
<td>Acute Tox. 4;H312</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eye Dam. 1;H318</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin Sens. 1;H317</td>
<td></td>
</tr>
<tr>
<td>Proprietary*</td>
<td>0.10 - 1.0</td>
<td>Skin Irrit. 2;H315</td>
<td>[1]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eye Irrit. 2;H319</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin Sens. 1;H317</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aquatic Chronic 3;H412</td>
<td></td>
</tr>
<tr>
<td>Cyclotetrasiloxane, octamethyl-</td>
<td>0.10 - 1.0</td>
<td>Repr. 2;H361f</td>
<td>[1][3]</td>
</tr>
<tr>
<td>CAS Number: 0000556-67-2</td>
<td></td>
<td>Aquatic Chronic 4;H413</td>
<td></td>
</tr>
</tbody>
</table>

*In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

1] Substance classified with a health or environmental hazard.

2] Substance with a workplace exposure limit.

3] PBT-substance or vPvB-substance.

*The full texts of the phrases are shown in Section 16.

4. First aid measures

4.1. Description of first aid measures

General

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

Eyes

Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin
Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

Ingestion
If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Overview
Effects of Overexposure
Inhalation: Nasal and respiratory irritation, dizziness, fatigue, unconsciousness, asphyxiation.
Ingestion: Can cause gastrointestinal disorders.
Skin: Possible irritation, dermatitis, and defatting.
Possible cancer hazard. Contains an ingredient which may cause cancer based on animal data (See Section 3 and Section 15 for each ingredient). Risk of cancer depends on duration and level of exposure.
See section 2 for further details.

Eyes
Causes serious eye irritation.

Skin
May cause an allergic skin reaction. Causes mild skin irritation.

5. Fire-fighting measures

5.1. Extinguishing media
Water, carbon dioxide, foam or dry powder.

5.2. Special hazards arising from the substance or mixture
Hazardous decomposition: High temperatures and fires may produce carbon monoxide, oxides of nitrogen and various hydrocarbon fragments.
Keep away from heat / sparks / open flames / hot surfaces - No smoking.
Keep cool.
Ground / bond container and receiving equipment.
Use explosion-proof electrical / ventilating / light / equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust / fume / gas / mist / vapors / spray.

5.3. Advice for fire-fighters
This product is considered combustible and is a fire hazard. It supports combustion and decomposes under fire conditions to give off toxic materials. Do not pour, spill, or store near heat, spark sources, or open flame.
If electrical equipment is involved, the use of foam should be avoided. Use water spray to cool non-involved containers.
Wear SCBA with a full-face piece operated in the positive pressure demand mode and full protective clothing (Bunker Gear) when fighting fires.

ERG Guide No. ----
6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions
Do not allow spills to enter drains or waterways.
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up
Small spill: Remove with absorbent material.
Large spill: Eliminate all ignition sources. Ventilate enclosed areas or wear self-contained breathing apparatus. Recover free liquid in closed containers. Keep out of sewers and water courses. Clean area with absorbent material.

7. Handling and storage

7.1. Precautions for safe handling
Protect from freezing.
See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities
Handle containers carefully to prevent damage and spillage.
Naked flames and smoking should not be permitted in storage areas. It is recommended that fork lift trucks and electrical equipment are protected to the appropriate standard.
Incompatible materials: Avoid strong oxidizing agents, concentrated nitric and sulfuric acids, halogen, and molten sulfur.
Store in a cool, dry place. Keep container tightly closed when not in use.
See section 2 for further details. - [Storage]:

7.3. Specific end use(s)
No data available.

8. Exposure controls and personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Exposure</th>
<th>CAS No.</th>
<th>Ingredient</th>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0014464-46-1</td>
<td>Cristobalite</td>
<td>ACGIH</td>
<td>TWA: 0.025 mg/m³</td>
</tr>
</tbody>
</table>

8.2. Exposure controls
Respiratory  If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

Eyes  Not normally required.

Skin  Use protective gloves as needed to avoid skin irritation.

Engineering Controls  Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Other Work Practices  Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Viscous white or gray Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Not specified</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flash Point</td>
<td>160°F ASTM D93</td>
</tr>
<tr>
<td>Evaporation rate (Ether = 1)</td>
<td>Slower than ether</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Lower Explosive Limit: 1.1</td>
</tr>
<tr>
<td></td>
<td>Upper Explosive Limit: 5.0</td>
</tr>
<tr>
<td>VOC Content</td>
<td>&lt; 50 g/liter</td>
</tr>
<tr>
<td>Density</td>
<td>Heavier than air (Air + 1)</td>
</tr>
</tbody>
</table>

9.2. Other information  No other relevant information.
10. Stability and reactivity

10.1. Reactivity
Hazardous Polymerization will not occur.

10.2. Chemical stability
Stable under normal circumstances.

10.3. Possibility of hazardous reactions
No data available.

10.4. Conditions to avoid
Keep away from heat, flame and other potential ignition sources.

10.5. Incompatible materials
Avoid strong oxidizing agents, concentrated nitric and sulfuric acids, halogen, and molten sulfur.

10.6. Hazardous decomposition products
High temperatures and fires may produce carbon monoxide, oxides of nitrogen and various hydrocarbon fragments.

11. Toxicological information

Acute toxicity

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Oral LD50, mg/kg</th>
<th>Skin LD50, mg/kg</th>
<th>Inhalation Vapor LC50, mg/L/4hr</th>
<th>Inhalation Dust/Mist LC50, mg/L/4hr</th>
<th>Inhalation Gas LC50, ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butanone oxime - (96-29-7)</td>
<td>930.00, Rat - Category: 4</td>
<td>2,000.00, Rabbit - Category: 4</td>
<td>20.00, Rat - Category: 4</td>
<td>No data available</td>
<td>5,000.00, Rat - Category: 4</td>
</tr>
<tr>
<td>Cyclotetrasiloxane, octamethyl- - (556-67-2)</td>
<td>2,000.00, Rat - Category: 4</td>
<td>4,640.00, Rabbit - Category: 5</td>
<td>36.00, Rat - Category: NA</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Carcinogen Data

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Ingredient</th>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0013463-67-7</td>
<td>Titanium dioxide</td>
<td>IARC</td>
<td>Group 2b: Yes</td>
</tr>
<tr>
<td>0014464-46-1</td>
<td>Cristobalite</td>
<td>NTP</td>
<td>Known: Yes</td>
</tr>
</tbody>
</table>

12. Ecological information

12.1. Toxicity
The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and GHS and is not classified as dangerous for the environment, but contains substance(s) dangerous for the environment. See section 3 for details.

### Aquatic Ecotoxicity

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>96 hr LC50 fish, mg/l</th>
<th>48 hr EC50 crustacea, mg/l</th>
<th>ErC50 algae, mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethylsiloxane - (63148-62-9)</td>
<td>3.16, Ictalurus punctatus</td>
<td>44.50, Daphnia magna</td>
<td>Not Available</td>
</tr>
<tr>
<td>2-Butanone oxime - (96-29-7)</td>
<td>320.00, Leuciscus idus</td>
<td>500.00, Daphnia magna</td>
<td>83.00 (72 hr), Scenedesmus subspicatus</td>
</tr>
<tr>
<td>Proprietary</td>
<td>597.00, Danio rerio</td>
<td>81.00, Daphnia magna</td>
<td>126.00 (72 hr), Scenedesmus subspicatus</td>
</tr>
<tr>
<td>Cyclotetrasiloxane, octamethyl- - (556-67-2)</td>
<td>200.00, Leuciscus idus</td>
<td>25.20, Daphnia magna</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

#### 12.2. Persistence and degradability

There is no data available on the preparation itself.

#### 12.3. Bioaccumulative potential

Not Measured

#### 12.4. Mobility in soil

No data available.

#### 12.5. Results of PBT and vPvB assessment

This product contains PBT/vPvB chemicals.

#### 12.6. Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Potentially toxic to aquatic life.

### 13. Disposal considerations

**13.1. Waste treatment methods**

Observe all federal, state and local regulations when disposing of this substance.

### 14. Transport information

<table>
<thead>
<tr>
<th>14.1. UN number</th>
<th>DOT (Domestic Surface Transportation)</th>
<th>IMO / IMDG (Ocean Transportation)</th>
<th>ICAO/IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not Applicable</td>
<td>Not Regulated</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>14.2. UN proper shipping name</td>
<td>Not Regulated</td>
<td>Not Regulated</td>
<td>Not Regulated</td>
</tr>
</tbody>
</table>
14.3. Transport hazard class(es)  
**DOT Hazard Class:** Not Applicable  
**IMDG:** Not Applicable  
**Air Class:** Not Applicable  
**Sub Class:** Not Applicable

14.4. Packing group  
Not Applicable

14.5. Environmental hazards

| IMDG | Marine Pollutant: No |

14.6. Special precautions for user  
No further information

## 15. Regulatory information

<table>
<thead>
<tr>
<th>Regulatory Overview</th>
<th>The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Toxic Substance Control Act (TSCA)</strong></td>
<td>All components of this material are either listed or exempt from listing on the TSCA Inventory.</td>
</tr>
<tr>
<td><strong>WHMIS Classification</strong></td>
<td>B3 D2A</td>
</tr>
</tbody>
</table>
| **US EPA Tier II Hazards** | **Fire:** Yes  
  **Sudden Release of Pressure:** No  
  **Reactive:** No  
  **Immediate (Acute):** Yes  
  **Delayed (Chronic):** Yes |

**EPCRA 311/312 Chemicals and ROQs:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**EPCRA 302 Extremely Hazardous:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**EPCRA 313 Toxic Chemicals:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Carcinogens (>0.0%):**

- Titanium dioxide

**Proposition 65 - Developmental Toxins (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Female Repro Toxins (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Male Repro Toxins (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**New Jersey RTK Substances (>1%):**

- Cristobalite  
- Titanium dioxide

**Pennsylvania RTK Substances (>1%):**
16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

This is the latest version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.

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End of Document