SAFETY DATA SHEET
STARKOTE AQ-490-2

SECTION 1. IDENTIFICATION

Product name : STARKOTE AQ-490-2
Product Use Description : AQUEOUS SATIN COATING HOT SCUFF & HEAT RESISTANT

Manufacturer or supplier's details
Company : ACTEGA Kelstar
1050 Taylors Lane
Cinnaminson, NJ 08077
Telephone : (800) 255-0021
Telefax : (856) 786-2860
Visit our web site : www.actega.com
Emergency telephone number : Chemtrec Phone: 1-800-424-9300 / +1 703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Not a hazardous substance or mixture.

GHS Label element
Not a hazardous substance or mixture.

Other hazards
The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 1 %

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Furanmethanol, tetrahydro</td>
<td>97-99-4</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
<tr>
<td>Ethanol, 2-propoxy-</td>
<td>2807-30-9</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
<tr>
<td>Silica, amorphous</td>
<td>7631-86-9</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

General advice : Get medical attention immediately if symptoms occur. Treat symptomatically.

If inhaled : If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.
### SECTION 5. FIREFIGHTING MEASURES

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suitable extinguishing media</td>
<td>Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.</td>
</tr>
<tr>
<td>Specific hazards during firefighting</td>
<td>Do not use a solid water stream as it may scatter and spread fire.</td>
</tr>
<tr>
<td>Further information</td>
<td>Use water spray to cool unopened containers.</td>
</tr>
<tr>
<td>Special protective equipment for firefighters</td>
<td>In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.</td>
</tr>
</tbody>
</table>

### SECTION 6. ACCIDENTAL RELEASE MEASURES

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal precautions, protective equipment and emergency procedures</td>
<td>Ensure adequate ventilation. Use personal protective equipment.</td>
</tr>
<tr>
<td>Environmental precautions</td>
<td>Prevent spilled material from entering the ground, water and/or air by using appropriate containment methods.</td>
</tr>
<tr>
<td>Methods and materials for containment and cleaning up</td>
<td>Soak up with inert absorbent material.</td>
</tr>
</tbody>
</table>

### SECTION 7. HANDLING AND STORAGE

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advice on safe handling</td>
<td>Use only in accordance with our recommendations.</td>
</tr>
<tr>
<td>Conditions for safe storage</td>
<td>Keep container tightly closed in a dry and well-ventilated place.</td>
</tr>
<tr>
<td>Materials to avoid</td>
<td>Keep away from oxidising agents and strongly acid or alkaline</td>
</tr>
</tbody>
</table>
SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Defoamer</td>
<td>-</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>10 mg/m³</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td>2-Furanmethanol, tetrahydro</td>
<td>97-99-4</td>
<td>TWA</td>
<td>0.5 ppm</td>
<td>US WEEL</td>
</tr>
<tr>
<td>Silica, amorphous</td>
<td>7631-86-9</td>
<td>TWA (Dust)</td>
<td>20 Million particles per cubic foot (Silica)</td>
<td>OSHA Z-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Dust)</td>
<td>80 mg/m³ / %SiO₂ (Silica)</td>
<td>OSHA Z-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>6 mg/m³ (Silica)</td>
<td>NIOSH REL</td>
</tr>
</tbody>
</table>

**Engineering measures**: Handle only in a place equipped with local exhaust (or other appropriate exhaust).

**Personal protective equipment**

**Hand protection Material**: Impervious gloves

**Eye protection**: Safety glasses with side-shields

**Skin and body protection**: Long sleeved clothing

**Protective measures**: Ensure that eye flushing systems and safety showers are located close to the working place.

**Hygiene measures**: Handle in accordance with good industrial hygiene and safety practice.

Wash hands before eating, drinking, or smoking.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES
<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Aqueous solution</td>
</tr>
<tr>
<td>Colour</td>
<td>white</td>
</tr>
<tr>
<td>Odour</td>
<td>ammoniacal</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>8 - 9.4</td>
</tr>
<tr>
<td>Initial boiling point</td>
<td>&gt; 200.1 °F (&gt; 93.4 °C)</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 200.1 °F (&gt; 93.4 °C)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative Density/Specific</td>
<td>1.044 (68 °F (20 °C))</td>
</tr>
<tr>
<td>Gravity</td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>8.70 lb/gal</td>
</tr>
<tr>
<td>Bulk density</td>
<td>No data available</td>
</tr>
<tr>
<td>Water solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Thermal decomposition</td>
<td>Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Nitrogen oxides (NOx)</td>
</tr>
<tr>
<td>Viscosity</td>
<td>&gt; 21 mm²/s (104 °F (40 °C))</td>
</tr>
</tbody>
</table>
SECTION 10. STABILITY AND REACTIVITY

Possibility of hazardous reactions:
- Acids and bases

Conditions to avoid:
- Keep away from open flames, hot surfaces and sources of ignition.

Hazardous decomposition products:
- Stable under recommended storage conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eyes
Skin contact
Inhalation

Acute toxicity

**Product:**
- Acute dermal toxicity: Acute toxicity estimate: > 5,000 mg/kg
  - Method: Calculation method

**Components:**
- 97-99-4 2-Furanmethanol, tetrahydro:
  - Acute oral toxicity: LD50 (Rat): 1,600 mg/kg
  - Acute dermal toxicity: LD50 (Guinea pig): 5,000 mg/kg

- 7631-86-9 Silica, amorphous:
  - Acute oral toxicity: LD50 (Rat): > 10,000 mg/kg
  - Acute inhalation toxicity: LC50 (Rat, male and female): 58.8 mg/l
    - Exposure time: 4 h
    - Method: OECD Test Guideline 403
    - GLP: yes

Skin corrosion/irritation

**Product:**
- Remarks: No data available

**Components:**
- 7631-86-9 Silica, amorphous:
  - Species: Rabbit
Result: No skin irritation

Serious eye damage/eye irritation

**Product:**
Remarks: No data available

**Components:**
7631-86-9 Silica, amorphous:
Species: Rabbit
Result: No eye irritation

Respiratory or skin sensitisation

**Product:**
Remarks: No data available

Carcinogenicity

**IARC**
No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**ACGIH**
No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**OSHA**
No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**
No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Repeated dose toxicity

**Product:**
Remarks: No data available

Further information

**Product:**
Remarks: No data available
SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:
Toxicity to fish : Remarks: No data available
Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Persistence and degradability

Product:
Biodegradability : Remarks: No data available

Bioaccumulative potential

Product:
Bioaccumulation : Remarks: No data available

Mobility in soil
No data available

Other adverse effects
No data available

Product:
Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues : Dispose of in accordance with applicable local/municipal, state/provincial and federal regulations. The hazard and precautionary statements displayed on the label also apply to any residues left in the container.
Contaminated packaging : Do not re-use empty containers.
SECTION 14. TRANSPORT INFORMATION

International Regulation

IATA-DGR
Not regulated as a dangerous good

IMDG-Code
Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

National Regulations

49 CFR
Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

WHMIS Classification : D2B: Toxic Material Causing Other Toxic Effects

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity
This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Reportable Quantity
This material does not contain any components with a SARA 302 RQ.

SARA 311/312 Hazards : Acute Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This product contains the following toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

Ethanol, 2-propoxy- 2807-30-9 3.9 %

Clean Air Act
The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

Ethanol, 2-propoxy- 2807-30-9 3.9 %
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

- Ethanol, 2-propoxy- 2807-30-9 3.9 %

VOC : 0.68 lb/gal 7.77 %

Non-volatile information is not a specification.

Massachusetts Right To Know
- 2-Furanmethanol, tetrahydro 97-99-4
- Silica, amorphous 7631-86-9

Pennsylvania Right To Know
- Hydroxypropyl acrylate, acrylic acid polymer, ammonium salt Not Assigned
- 2-Furanmethanol, tetrahydro 97-99-4
- Ethanol, 2-propoxy- 2807-30-9
- Silica, amorphous 7631-86-9

New Jersey Right To Know
- Hydroxypropyl acrylate, acrylic acid polymer, ammonium salt Not Assigned
- 2-Furanmethanol, tetrahydro 97-99-4
- Ethanol, 2-propoxy- 2807-30-9
- Silica, amorphous 7631-86-9
- SURFACTANT Not Assigned

California Prop 65
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

LISTED : Listed
SECTION 16. OTHER INFORMATION

Further information

<table>
<thead>
<tr>
<th>NFPA:</th>
<th>HMIS III:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>HEALTH 2</td>
</tr>
<tr>
<td>Health</td>
<td>FLAMMABILITY 1</td>
</tr>
<tr>
<td>Instability</td>
<td>PHYSICAL HAZARD 0</td>
</tr>
</tbody>
</table>

Special hazard.

0 = not significant, 1 = Slight, 2 = Moderate, 3 = High, 4 = Extreme, * = Chronic

Revision Date : 05/21/2015

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