Asphalt Binder Plus

1. PRODUCT NAME
   Asphalt Binder Plus

2. MANUFACTURER
   ThorWorks Industries, Inc.
   2520 S. Campbell St.
   Sandusky, OH 44870
   Phone: 800-326-1994
   Fax: 419-626-5477
   www.thorworks.com

Additional Plant Locations:
SealMaster has a nationwide network of manufacturing and distribution facilities.

Phone 1-800-395-7325 or visit website at www.sealmaster.net to find the location near you.

3. PRODUCT DESCRIPTION & BENEFITS
   Asphalt Binder Plus is a polymer modified anionic asphalt emulsion designed for use as a recycling agent, rejuvenator, road crack sealant, and tack coat. Asphalt Binder Plus exceeds the ISSA requirements for SS1H.

   Basic Uses: Recyling agent, rejuvenator, road crack sealant, tack coat.

   Sizes: Available in bulk, 55-gallon drums, and 5-gallon pails.

   Color: Dries Black.

Limitations: Asphalt Binder Plus shall not be applied when temperature is expected to drop below 50°F within a 24 hour period after application.

4. TECHNICAL DATA
   Asphalt Binder Plus meets and exceeds the chemical composition and performance requirements of ASTM D977 and AASHTO M140.

   Environmental Considerations: Asphalt Binder Plus is an environmentally friendly water based asphalt emulsion containing less than 150 grams per liter volatile organic content (VOC).

   Physical/Chemical Properties: Asphalt Binder Plus meets the following specifications when tested in accordance with ASTM D140 and ASTM D244 test procedures (see chart below).

5. INSTALLATION
   Surface must be cleaned of dust, dirt and debris.

   Methods: Asphalt Binder Plus can be applied by spray or brush.

   Mixing/Application Procedures:
   • Recycling Agent For Infrared Patching: Use material as is. Dilution is not required.
   • Fog Seal or Rejuvenator: Dilute 1 to 1 with water and apply to old oxidized pavement to replenish the asphalt binder that is lost through aging, oxidation, and weathering. Apply by spray at a rate of .06 to .10 gallons of mixed material per square yard (.03 to .05 concentrate Asphalt Binder Plus per square yard). Do not apply to smooth pavement surfaces. Do not over apply and create a slick surface. Pavement must have porosity and profile to maintain friction for vehicles.
   • Tack Coat For Patching or Paving: Dilute 1 to 1 with water. Apply by spray or brush. Apply at a rate of .06 to .10 gallons of mixed material per square yard (.03 to .05 concentrate).

6. AVAILABILITY & COST
   Availability: Asphalt Binder is supported by a national network of SealMaster facilities along with a national network of professional applicators.

   Cost:
   • Fog Seal or Rejuvenator: .03 to .05 gallons per square yard.
   • Tack Coat For Patching or Paving: .03 to .05 gallons per square yard.

7. WARRANTY
   SealMaster warrants that Asphalt Binder meets the chemical composition and performance requirements set forth in section 4. Liability to the buyer or user of this product is limited to the replacement value of the product only.

Chemical & Physical Analysis

Tests On Emulsion:

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viscosity, Saybolt Furol at 77°F (25°C), s</td>
<td>36</td>
</tr>
<tr>
<td>Storage Stability Test, 24-h, %</td>
<td>1</td>
</tr>
<tr>
<td>Cement Mixing Test, %</td>
<td>&lt; 2%</td>
</tr>
<tr>
<td>Sieve Test, %</td>
<td>0.013</td>
</tr>
<tr>
<td>Residue by distillation, %</td>
<td>65% ± 2%</td>
</tr>
</tbody>
</table>

Tests On Residue:

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Penetration, 77°F (25°C) 100g, 5s</td>
<td>55</td>
</tr>
<tr>
<td>Ductility, 77°F (25°C) 5 cm/min, cm</td>
<td>&gt; 150</td>
</tr>
<tr>
<td>Softening Point, R&amp;B, °F</td>
<td>&gt; 130</td>
</tr>
<tr>
<td>Toughness, inch-pounds</td>
<td>&gt; 80</td>
</tr>
<tr>
<td>Tenacity, inch-pounds</td>
<td>&gt; 60</td>
</tr>
<tr>
<td>Solubility in trichlorethylene, %</td>
<td>&gt; 97.5</td>
</tr>
</tbody>
</table>
Asphalt Binder Plus

8. TECHNICAL SERVICES
Manufacturer: Complete product specifications, material safety data sheets, and technical assistance is available from SealMaster.

Professional Applicators: Your local applicator is available to provide on-site inspections and recommendations to meet your specific needs.

9. FILING SYSTEMS

- SealMaster Online Specifications at www.sealmaster.net
- Complete SealMaster Product and Equipment Catalog Available
- Sweet's Catalog
- Sweet's CD
- Sweet's Online
- Sweet's Directory

www.sealmaster.net

The statements made on this specification sheet are believed to be true and accurate and are intended to provide a guide for approved application practices. As workmanship, weather, construction, condition of pavement, tools utilized, and other variables affecting results are all beyond our control, the manufacturer warrants only that the material conforms to product specifications and any liability to the buyer or user of this product is limited to the replacement value of the product only. The manufacturer expressly disclaims any implied warranties of merchantability or fitness for a particular purpose. Warranty is void on multi-coat applications if material made by other manufacturers is used with this product.