NovaGrip 975 is a next-generation, worker-friendly liquid anti-strip that extends pavement life by creating powerful chemical adhesion of asphalt to aggregate, protecting them from moisture damage and resultant pavement distresses such as raveling, pothole development and rutting. It is engineered for robustness and versatility, and delivers reliably strong performance with a wide variety of asphalt and aggregate combinations. NovaGrip 975 is added directly to asphalt and is compatible with all asphalt types. NovaGrip 975 is used to design mixes that conform to typical specifications, including AASHTO T283: Method of Test for Resistance of Compacted Bituminous Mixture to Moisture Induced Damage, AASHTO T324: Method of Test for Hamburg Wheel-Track Testing of Compacted Hot Mix Asphalt (HMA), and AASHTO R35: Standard Practice for Superpave Volumetric Design.

### TECHNICAL DATA SHEET

#### WORKER-FRIENDLY LIQUID ANTI-STRIP CHEMISTRY FOR ALL ASPHALTS

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### APPLICATIONS

Asphalt Paving

### USE NOVAGRIP 975 WHEN YOU NEED:

- To eliminate smoke and odor at the terminal, mix plant or jobsite
- Passing TSR and Hamburg results
- An additive that works with PPA
- An additive that pumps easily at cold temperatures

### FEATURES

#### NO ODOR AND NO SMOKE
Worker-friendly for improved comfort of plant and paving crew personnel

#### RELIABLE ANTI-STRIPPING EFFECTIVENESS
Passes tensile strength ratio (TSR) and Hamburg wheel tests with wide variety of asphalt and aggregate combinations

#### WORKS WITH ALL ASPHALT MODIFIERS
Does not affect performance grade of polyphosphoric acid (PPA) modified asphalt

#### BETTER MIX WORKABILITY
Enables easier hand-work

#### HEAT STABILITY
Remains effective several weeks to months in hot asphalt

#### NO HEATED STORAGE REQUIRED
Easy to handle and pump in cold temperatures

### COMPARABILITY

#### ASPHALT
Compatible with all asphalt types including those modified with polyphosphoric acid (PPA), styrene-butadiene-styrene (SBS), styrene-butadiene rubber (SBR), ethylene-vinyl acetate (EVA) polymers and ground tire rubber (GTR)

#### AGGREGATES
Compatible with various aggregate types including granite, diabase, diorite, basalt, chert, limestone, dolomite, marble, sandstone, natural sand, slag and recycled asphalt pavement (RAP)
USAGE RECOMMENDATIONS

NEAT AND MODIFIED ASPHALTS:
- 0.25 – 0.75% by weight of total asphalt in mix
- Usage rate should be determined by user based on degree of aggregate coating and moisture sensitivity testing at desired production temperature

OPTIONS FOR ADDING NOVAGRIP 975 TO ASPHALT:
1. Add to asphalt storage tank and agitate mechanically or through pump circulation
2. Add at asphalt terminal by injecting into asphalt line as transport tanker is being charged
3. Add at asphalt mix plant by in-line injecting into the asphalt line (continuous plant) or weigh hopper (batch plant)

PHYSICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance, 77 °F (25 °C)</td>
<td>Brown</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild</td>
</tr>
<tr>
<td>Density, 77 °F (25 °C)</td>
<td>7.74 lb/gal (0.93 kg/L)</td>
</tr>
<tr>
<td>Viscosity, 77 °F (25 °C)</td>
<td>50 cP</td>
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<tr>
<td>TSCA Inventory</td>
<td>Listed</td>
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<tr>
<td>DSL Inventory</td>
<td>Listed</td>
</tr>
<tr>
<td>REACH</td>
<td>Compliant</td>
</tr>
<tr>
<td>C.A.S. Number</td>
<td>Proprietary</td>
</tr>
</tbody>
</table>

The density and viscosity data reported are typical and not specifications. Typical ranges for density and viscosity values are ± 2% and ± 20%.

HANDLING AND STORAGE

Always handle NovaGrip 975 in accordance with Safety Data Sheet (SDS) and Road Science Asphalt Additives Handling and Storage Guidelines document. Avoid product contamination with other materials. Do not store product in excess of 120 °F (50 °C) for prolonged periods. Recommended product handling temperature range is 32 – 100 °F (0 – 38 °C).

AVAILABILITY

NovaGrip 975 is available for shipment in bulk by rail car and tank truck. Packaged quantities are available in 275 gal/1,000 L IBC totes (2,000 lb/907.2 kg net weight) and 55 gal/208 L plastic drums (410 lb/186.0 kg net weight).

TECHNICAL SUPPORT

To request additional product information, contact your regional Road Science representative. You can also contact us at 918-960-3800 or customerservice@roadscience.net, or visit our website at www.roadscience.net.

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