AD-HERE® XL9000
Asphalt Mix Performance-Improving Additive

LIQUID ANTI-STRIP CHEMISTRY ENGINEERED FOR WESTERN UNITED STATES AGGREGATES

AD-Here XL9000 is a liquid anti-strip that extends pavement life by creating powerful chemical adhesion of asphalt to aggregate, protecting from moisture damage and resulting pavement distresses such as raveling, pothole development and rutting. Its chemistry is specifically formulated for the challenging aggregates of the Western United States, delivering reliably strong tensile strength ratio (TSR) and Hamburg Wheel-Track test performance with a wide variety of asphalt and aggregate combinations. AD-Here XL9000 is added directly to asphalt and is compatible with most asphalt types. AD-Here XL9000 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.

APPLICATIONS

Asphalt Paving

FEATURES

DEVELOPED FOR WESTERN UNITED STATES PAVING STAKEHOLDERS
Chemistry is formulated specifically for the challenging surface chemistry of Western US igneous and metamorphic paving aggregates

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

BETTER MIX WORKABILITY
Enables easier hand-work

HEAT STABILITY
Remains effective several weeks in hot asphalt

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

COMPATIBILITY

ASPHALT
Compatible with all asphalt types including those modified with 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, gabbro, rhyolite, andesite, dacite, chert, sandstone, quartzite, gneiss, slag, natural sand and gravel, and recycled asphalt pavement (RAP)

USE AD-HERE XL9000 WHEN YOU NEED:
• Passing TSR and Hamburg results with challenging asphalt and aggregate combinations
• An additive that pumps easily at cold temperatures
OPTIONS FOR ADDING AD-HERE XL9000 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)

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

USAGE RECOMMENDATIONS

PHYSICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Appearance, 77 °F (25 °C)</td>
<td>Brown</td>
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<tr>
<td>Odor</td>
<td>Ammoniacal</td>
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<tr>
<td>Density, 77 °F (25 °C)</td>
<td>8.38 lb/gal (1.00 kg/L)</td>
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<tr>
<td>Viscosity, 77 °F (25 °C)</td>
<td>450 cP</td>
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<tr>
<td>TSCA Inventory</td>
<td>Listed</td>
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<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 AD-here XL9000 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 40 – 100 °F (4 – 38 °C).

AVAILABILITY

AD-here XL9000 is available for shipment in bulk by rail car and tank truck. Packaged quantities are available in 275 gal/1,000 L IBC totes (2,200 lb/997.9 kg net weight) and 55 gal/208 L steel drums (420 lb/190.5 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.