ARRTEKK® A-371
Cationic (+) Rapid-Setting (CRS) Asphalt Emulsifier

TECHNICAL DATA SHEET

SUPERIOR EMULSION VISCOSITY BUILD AND CONTROL CHARACTERISTICS WITH FASTER CHIP SEAL SWEEPING

ArrTekk A-371 is an emulsifier chemical used to produce CRS emulsions for chip seals and a variety of other applications. Its chemistry is engineered to yield high emulsion viscosity with minimal asphalt content, and deliver faster breaking and curing chip seals.


APPLICATIONS
- CRS-2P, CRS-2L Chip Seal
- CRS-2 Chip Seal
- CRS-1
- CMS Mixing Grade
- Scrub Seal
- Sand Seal
- Hot-in-Place Recycling

FEATURES
- HIGHER VISCOSITY AT LOWER ASPHALT RESIDUE
  Chemistry engineered to yield higher emulsion viscosity at lower asphalt residue
- VISCOSITY STABILITY
  Emulsion viscosity remains consistent off of the mill and will not build or drop appreciably while emulsion is stored, even during extended storage
- FASTER CHIP SEAL BREAK AND CURE
  Allows for 50% sooner sweeping operation, diminishing motorist windshield damage caused by loose chip aggregate
- EMBEDDED ADHESION PROMOTER TECHNOLOGY
  Creates strong chemical bonding between asphalt and aggregate chip for better sweep test performance, reduced chip loss and greater chip seal durability
- VERSATILE
  Used to produce CRS emulsions for a variety of applications
  Performs across a wide variety of asphalt sources, offering formulation flexibility
- FASTER SOAP SOLUTION PRODUCTION
  Solubilizes quickly and with minimal mixing

COMPATIBILITY
- ASPHALT
  Compatible with most asphalts including those modified with styrene-butadiene-styrene (SBS), styrene-butadiene rubber (SBR) and ground tire rubber (GTR)
- AGGREGATE
  Compatible with various aggregate types including granite, diabase, basalt, chert, limestone, slag and recycled asphalt pavement (RAP)

USE ARRTEKK A-371 WHEN YOU NEED:
- Higher emulsion viscosity at lower asphalt residue
- Stable emulsion viscosity
- Diminished windshield damage
- Longer-lasting chip seal

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USAGE RECOMMENDATIONS

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Typical asphalt residue content for CRS emulsion is 65 – 68%. Percentages are by weight of emulsion (bwe).

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Typical Formulation</th>
<th>ArrTekk A-371, % bwe</th>
<th>Hydrochloric Acid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance, 35 °C (95 °F)</td>
<td>Dark Liquid</td>
<td>CRS-2</td>
<td>0.28 – 0.32%</td>
<td>To soap pH of 1.8 – 2.2</td>
</tr>
<tr>
<td>Odor</td>
<td>Ammoniacal</td>
<td>CRS-2P, CRS-2L</td>
<td>0.30 – 0.40%</td>
<td>To soap pH of 1.8 – 2.2</td>
</tr>
<tr>
<td>Density, 35 °C (95 °F)</td>
<td>0.86 kg/l (7.2 lb/gal)*</td>
<td>CRS-1</td>
<td>0.28 – 0.32%</td>
<td>To soap pH of 1.8 – 2.2</td>
</tr>
<tr>
<td>Viscosity, 35 °C (95 °F)</td>
<td>80 cP*</td>
<td>CMS-2 Mixing Grade</td>
<td>0.40 – 0.50%</td>
<td>To soap pH of 1.8 – 2.2</td>
</tr>
<tr>
<td>TSCA Inventory</td>
<td>Listed</td>
<td>Scrub Seal/Sand Seal</td>
<td>0.40 – 0.50%</td>
<td>To soap pH of 1.8 – 2.2</td>
</tr>
<tr>
<td>C.A.S. Number</td>
<td>Proprietary</td>
<td>Hot-in-Place Recycling</td>
<td>0.40 – 0.50%</td>
<td>To soap pH of 1.8 – 2.2</td>
</tr>
</tbody>
</table>

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

Handling ArrTekk A-371 in accordance with Safety Data Sheet (SDS). Avoid contamination with other materials. Do not store product in excess of 60 °C (140 °F) for prolonged periods. Recommended handling temperature range is 35-52 °C (95-125 °F). Product has paste consistency and cannot be pumped below 35 °C (95 °F).

ArrTekk A-371 is available outside of North America only. ArrTekk A-371 is available for shipment in bulk by tank truck. Packaged quantities are available in 1,000 L/275 gal IBC totes (839.1 kg/1,850 lb net weight) and 208 L/55 gal steel drums (167.8 kg/370 lb net weight).

TECHNICAL SUPPORT

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