

## SYLVACOTE™ 4101RM Rosin Ester

### PRODUCT DATA SHEET

SYLVACOTE 4101RM rosin ester binder enables pavement marking formulators to reduce TiO<sub>2</sub> use in thermoplastic traffic striping formulations, with the binder color remaining low during melting and application. The optimized rheology of SYLVACOTE 4101RM permits higher filler loading in screed/extrusion applied formulations. Therefore, making the product an excellent choice for spray-applied formulations.

#### FEATURES

- Low color through pot life
- Low melt viscosity, stable through pot life
- Good adhesion with glass beads, anti-skid aggregates and the pavement
- Thermal and UV stability
- Oil & gas resistance
- Does not contain microplastic<sup>1</sup>
- SYLVACOTE 4101RM rosin ester contains 98% USDA certified biobased content

<sup>1</sup>Material is not a polymer according to REACH definition, therefore not a microplastic under proposed ECHA restriction

#### POTENTIAL APPLICATIONS

- Spray- or screed-applied thermoplastic traffic striping
- Preformed thermoplastic pavement marking
- Thermoplastic pavement marking tape

#### SALES SPECIFICATIONS

Property	Test Method*	Specification	Typical Value
Softening Point (°C)	ASTM E28 (AQCM 003)	100 - 106	102
Color, Gardner, 50wt% in toluene	ASTM D6166 (AQCM 002)	Max. 3	1
Acid Number (mg KOH/g)	ASTM D465 (AQCM 001)	Max. 12	8

\*Kraton test methods are available upon request

#### TYPICAL VALUES

Property	Test Method*	Typical Value	
Glass Transition Temperature (°C)	Internal method (AQCM 218)	51	
Flashpoint (°C)	ASTM D92 (AQCM 007)	>260°C	
Viscosity (mPa·s)	ASTM D2196 (AQCM 004)	150°C	1600
		180°C	220
		200°C	85

\*Kraton test methods are available upon request

<p><b>SOLUBILITY</b></p>	<p>SYLVACOTE™ 4101RM rosin ester is soluble in:</p> <ul style="list-style-type: none"> <li>- Aromatic / aliphatic solvents like hexane &amp; toluene</li> <li>- Esters and ketones like ethylacetate and acetone</li> <li>- Long chain alcohols like pentanol.</li> </ul> <p>SYLVACOTE 4101RM is insoluble in alcohols and water.</p>
<p><b>COMPATIBILITY</b></p>	<p>SYLVACOTE 4101RM can be plasticized with mineral oil or tall oil esters and is compatible with most commonly used polymers and waxes:</p> <ul style="list-style-type: none"> <li>- Ethylene co-polymers like EVA with 18 to 45% VA</li> <li>- Acrylics</li> <li>- Natural rubber &amp; synthetic rubber (SIS, SBR and SBS)</li> <li>- Paraffin, microcrystalline, FT and polyethylene waxes.</li> </ul>
<p><b>PACKAGING</b></p>	<p>SYLVACOTE 4101RM is delivered in pastilles in 25 kg bags or in 1000 kg bulk bags.</p>
<p><b>STORAGE RECOMMENDATION</b></p>	<p>It is recommended that SYLVACOTE 4101RM be stored dry and below 25°C. To prevent remassing, keep away from direct sun light or other sources of heat. Product stored or transported at higher temperatures should be evaluated for impact on performance before use.</p>



The USDA Certified Biobased Product label is a certification mark of the U.S. Department of Agriculture.

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