

<b>State:</b> Kansas	<b>Materials:</b> Re: Section 1202 – Performance Graded Asphalt Binder
<b>Date Last Reviewed:</b> 2-14-2025	<b>Web Address:</b> www.ksdot.org
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Asphalt Binder		
Sections: 1200 1202.1 1202.2	Highlights	KDOT – is currently collecting data - future implementation of M332 is under consideration. They have implemented for projects bid after Aug. 1, 2019 a requirement for Delta Tc after 40 hours of PAV aging must be greater than -5C.
	PMA Notes	All PG above a PG 64-22 be polymer modified. Supplier determines polymer. Perform all tests after adding 0.5% high molecular weight amine anti-stripping agent (by weight) to the PGAB.
	Exclusions and Limits	None.

Kansas		Table 1: Requirements for Performance-Graded Asphalt Binders							
Property		Test Method: AASTHO (T), ASTM (D) or other	Requirements by Performance Grade (Notes 1, 2)						
			Non-modified		Modified				
			58-28	64-22	52-34	58-34	64-28		
<b>ORIGINAL</b>									
Flash Point, ° C		T48	230 min.						
Rotational Viscosity, Pa·s	135° C	T316	3 max.						
Dynamic Shear, kPa (G*/sin δ, 10 rad./sec)	At Grade Temperature	T315	1.00 min.						
Separation of Polymer, Softening Point Difference, ° C, 48hrs.	163° C	D7173	-		2 max.				
<b>RTFO RESIDUE</b>		T240							
Mass Change, %		T240	1.00 max.						
Dynamic Shear, kPa (G*/sin δ, 10 rad./sec.)	At Grade Temperature	T315	2.20 min.						
Elastic Recovery, % minimum	25° C	D6084 Procedure A	-		50	60	60		
<b>PAV RESIDUE</b>		R28	100° C, 20 hrs, 300 psi						
Dynamic Shear, kPa (G*/sin δ, 10 rad./sec.)	At Test Temperature	T315	19° C	25° C	13° C	16° C	22° C		
			5000 max.						
Creep Stiffness, MPa	At Test Temperature	T313	-18° C	-12° C	-24° C		-18° C		
			300 max.						
M-Value			0.300 min.						
<b>PAV RESIDUE</b>		R28	40 hrs, 300 psi						
PAV Aging Temperature			100° C		90° C	100° C			
ΔTc		ASTM D7643	≥ -5.0° C						

To ensure the most accurate and current information, the specific agency should be contacted.



Kansas		Table 1 Continued: Requirements for Performance-Graded Asphalt Binders							
Property		Test Method: AASHTO (T), ASTM (D) or other	Requirements by Performance Grade (Notes 1, 2)						
			64-34	70-22	70-28	70-34	76-22	76-28	70-28 RCI
<b>ORIGINAL</b>									
Flash Point, ° C		T48	230 min.						
Rotational Viscosity, Pa·s	135° C	T316	3 max.						
Dynamic Shear, kPa (G*/sin δ, 10 rad./sec)	At Grade Temperature	T315	1.00 min.						
Separation of Polymer, Softening Point Difference, ° C, 48hrs.	163° C	D7173	2 max.						6 max.
<b>RTFO RESIDUE</b>		T240							
Mass Change, %		T240	1.00 max.						
Dynamic Shear, kPa (G*/sin δ, 10 rad./sec.)	At Grade Temperature	T315	2.20 min.						
Elastic Recovery, % minimum	25° C	D6084 Procedure A	65	60	65	75	65	75	65
<b>PAV RESIDUE</b>		R28	100° C, 20 hrs, 300 psi						
Dynamic Shear, kPa (G* · sin δ, 10 rad./sec.)	At Grade Temperature	T315	19° C	28° C	25° C	22° C	31° C	28° C	25° C
			5000 max.						
Creep Stiffness, MPa	At Grade Temperature	T313	-24° C	-12° C	-18° C	-24° C	-12° C	-18° C	-18° C
			300 max.						
M-Value			0.300 min.						
<b>PAV RESIDUE</b>		R28	100 °C, 40 hrs, 300 psi						
ΔTc		ASTM D7643	≥ -5.0° C						
<b>NOTES</b>		<ol style="list-style-type: none"> <li>Contractor may substitute performance graded asphalt which meets or exceeds the upper and lower grade designation for which is specified. For example: a PG 64-22 or PG 58-28 for a specified PG 58-22.</li> <li>Requirements in addition to M320 are shown in red.</li> </ol>							

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