State: Arkansas	**Materials:** Re: Section 404, Design and Quality Control of Asphalt Mixtures
Date Last Reviewed: 8/13/25	**Web Address: :** *https://www.ardot.gov/wp-content/uploads/2020/10/Division-400.pdf*
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Asphalt Binder		
404.01 (b)	Highlights	ARDOT has collected MSCR data, but has no immediate plans to implement the MSCR spec. Asphalt binder shall comply with the requirements of AASHTO M 320 Table 1, except the Direct Tension requirements are deleted, and shall be from sources that have executed a certification agreement with the Department. PG 70-22 and PG 76-22 asphalt binders shall be production straight run binders that are modified by using either a SB, SBS or SBR to achieve the specified grade. PG 70-22 and PG 76-22 asphalt binders shall meet a minimum elongation recovery of 40% and 50%, respectively, when tested on the original binder at 77º F (± 1º F) [25º C (± 0.5º C)], in accordance with AASHTO T 301. (1)
	PMA Notes	PG 70-22 & PG 76-22 shall be straight run binders that are modified using SB, SBS or SBR.
	Exclusions and Limits	Any use of recycled engine oil bottoms (REOB) or other engine oil derivatives in the manufacture or modification of a binder are strictly prohibited. Ground Tire Rubber (GTR) may be added to asphalt binder with blending of GTR into asphalt occurring only at the asphalt terminal. GTR shall be Class 80-1 ground tire rubber as defined by ASTM D5603.

Arkansas		**Table 1: Requirements for Performance-Graded Asphalt Binders** (Note 3)				
Property		**Test Method: AASTHO (T), ASTM (D) or other**	**Requirements by Performance Grade**			
			64-22	**67-22 (2)**	**70-22**	**76-22**
ORIGINAL						
Flash Point, ° C		T48	230 min.			
Rotational Viscosity, Pa·s	135° C	T316	3.00 max.			
Dynamic Shear, kPa (G*/sin δ, 10 rad./sec)	At Grade Temperature	T315	1.00 min.			
Elastic Recovery, %	25° C	T301	-		40 min.	50 min.
Polymer, Type	-	None	None		SBR, SB, SBS	SBR, SB, SBS
RTFO RESIDUE		T240				
Mass Change, %		T240	1.00 max.			
Dynamic Shear, kPa (G*/sin δ, 10 rad./sec.)	At Grade Temperature	T315	2.20 min.			
PAV RESIDUE		R28	100° C, 20 hrs, 300 psi			
Dynamic Shear, kPa (G*· sin δ, 10 rad./sec.)	At Test Temperature	T315	25° C	26.5° C	28° C	31° C
			5000 max.			
Creep Stiffness, MPa	At Test Temperature	T313	-12° C			
			300 max.			
M-Value			0.300 min.			
NOTES		1. If an anti-strip additive is needed, a heat stable liquid anti-strip additive from QPL shall be added at the rate of 0.5 - 0.75% by weight of asphalt binder as determined by laboratory analysis. The anti-stripping additive shall be added by an in-line blending process just before introduction of the asphalt binder to the mixer. 2. PG67-22 may be substituted for PG 64-22. 3. Requirements in addition to M320 are shown in red.				