

State: Wyoming	Materials: Re: Section 804.1 – Performance Graded Asphalt Binder
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Materials Engineer: Ethan Crockett, P.E.	Contact Info: ethan.crockett@wyo.gov

Asphalt Binder

Section 804.1	Highlights	The Performance Grade Asphalt Binder shall consist of an asphalt binder that is produced from petroleum residue either with or without the addition of polymer modifiers. The base asphalt binder shall be homogeneous, free from water and deleterious materials, and shall not foam when heated to 350°F.
	PMA Notes	May be any polymer dissolved dispersed or reacted in AC to enhance performance. May not be carcinogenic. No fibers or other discrete particles greater than 250 microns in size.

Wyoming	Table 1: PG Requirements for Performance-Graded Asphalt Binders
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Property		Test Method: AASHTO (T,R), ASTM (D) or other	Requirements by AASHTO Performance Grade (Note 1)											
			M 320 [<i>phasing out starting October 2024</i>]						M 332 (MSCR) [<i>phasing in starting October 2024</i>]					
			58-28	64-22	58-34	64-28	70-28	76-28	58S-28	64S-22	58S-34	64S-28	64H-34	64V-34
ORIGINAL														
Flash Point, ° C		T48	230 min.											
Rotational Viscosity, Pa·s	135° C	T316	3.0 max.											
Dynamic Shear, kPa (G*/sin δ, 10 rad./sec)	High Grade	T315	1.00 min.											
Specific Gravity	15.6° C	D70	Report											
Phosphoric Acid, % wt		D1091, D6443	1.00 max. (3800 ppm phosphorus content)											
RTFO RESIDUE		T240												
Mass Change, %		T240	1.00 max.											
Dynamic Shear, kPa (G*/sin δ, 10 rad./sec)	At High Grade Temp	T315	2.20 min.						-					
J _{nr3.2} , kPa ⁻¹ , max.		T350	-						4.5		2.0	1.0	0.5	
% Recovery, R _{3.2} , min.		-	20		30		55		75					
Elastic Recovery, % (2)	25° C	T301	-		50 min.				-					
PAV RESIDUE		R28	100° C, 20 hrs, 300 psi											
Dynamic Shear, kPa (G*.sin δ, 10 rad./sec)	Test Temp	T315	-											
Creep Stiffness, S, MPa	At Test Temp	T313	-18° C	-12° C	-24° C	-18° C			-12° C	-24° C	-18° C	-24° C		
M-Value			300 max.											
Direct Tension, % Strain			0.300 min.											
		T314	-											

NOTES	1. Requirements in addition to AASHTO M320 / M332 shown in red.
	2. Elastic Recovery required only for M320 grades where difference between high and low temperatures is 90 or greater. Sever specimen immediately after elongation.

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

