



## Performance Grade (P.G) 64-16 Analysis

(ASTM D6373)

<b>Original</b>					
<b>Test Method</b>	<b>Specifications</b>	<b>Unit</b>	<b>Result</b>		<b>Acceptable Range</b>
			<b>Pass</b>	<b>Fail</b>	
<b>Dynamic Shear Rheometer (D.S.R) ASTM D7175</b>	Temperature	°c	64		
	Phase angle ( $\delta$ )	°	86.4		
	G*	Kpa	1.15		
	$ G^* /\sin\delta$	Kpa	1.16		Min 1.0
<b>Rotational Viscometer (R.V) ASTM D4402</b>	at 135°c	Pa.s	0.32		Max 3
<b>Penetration ASTM D5</b>	at 25°c	0.1mm	68		
<b>Rolling Thin Film Oven (R.T.F.O) ASTM D2872</b>					
<b>Dynamic Shear Rheometer (D.S.R) ASTM D7175</b>	Temperature	°c	64		
	phase angle ( $\delta$ )	°	87.1		
	G*	Kpa	2.18		
	$ G^* /\sin\delta$	Kpa	2.21		Min 2.2
<b>Pressure Aging Vessel (P.A.V) ASTM D6521</b>					
<b>Dynamic Shear Rheometer (D.S.R) ASTM D7175</b>	Temperature	°c	25		
	phase angle ( $\delta$ )	°	54		
	G*	Kpa	5460		
	$ G^*  \times \sin\delta$	Kpa	4420		Max 5000
<b>Bending Beam Rheometer (B.B.R) ASTM D6648</b>	(Temperature)	°c	-16		
	m-Value		0.36		Min 0.3
	Stiffness	M.pa	83.3		Max 300