

# ILSAC GF-4

Engine Test Requirements as of January 2004

TEST TYPE	PURPOSE	PARAMETER	REQUIREMENT
<b>IIIG</b>	Oil Thickening	Kinematic viscosity increase @ 40°C	150%, max.
		Oil Consumption interpretability	4.65 L, max.
	Deposits – High Temp	Hot stuck rings	None
		Weighted piston deposits	3.5, min.
Wear - High Temp	Avg. cam and lifter wear	60 µm, max.	
<b>IIIGA</b>	Aged oil low-temperature viscosity	Apparent viscosity (MRV)	60,000 cP max (original grade or next highest)
<b>IVA</b>	Wear - Low Temp	Avg. cam wear	90 µm, max.
<b>VG</b>	Sludge – Low Temp	Avg. engine sludge	7.8, min.
		Rocker arm cover sludge	8.0, min.
		Oil screen sludge	20%, max.
	Varnish – Low Temp	Avg. engine varnish, 3 pt.	8.9, min.
		Avg. piston skirt varnish	7.5, min.
		Hot stuck compression rings	None
	Wear – Low Temp	Avg. follower pin wear, cyl. 8	Rate and report
		Avg. ring gap increase, cyl. 1 & 8	Rate and report
	Additional	Cold stuck rings	Rate and report
		Oil screen debris	Rate and report
Oil ring clogging		Rate and report	
<b>VIB</b>	Fuel Economy	SAE Viscosity Grades	Improvement over BC
			16-hr. aging    96-hr. aging
		0W-20 and 5W-20	2.3                      2.0
		0W-30 and 5W-30	1.8                      1.5
	All Others	1.1                      0.8	
<b>VIII</b>	Bearing Corrosion	Bearing weight loss	26 mg., max.
	Shear Stability	10 hours stripped 100°C viscosity	Must remain in original grade



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