

## Engine oils - SAE J 300, June J3002001 (Dec. 1999).

SAE- viscosity classes	Low temperature (°C) Cranking viscosity (ASTM D 5293)  (mPa s)  max.	Low temperature (°C) Pumping viscosity (ASTM D 4684)  (mPa s) With no yield stress  max.	Low shear rate Kinematic viscosity (ASTM D 445)  (mm <sup>2</sup> /s) at 100 °C		High shear rate viscosity (ASTM D 4683, CEC L-36-A-90 (ASTM D 4741)D5481)  (mPa s) at 150 °C and 10 <sup>6</sup> s <sup>-1</sup>  min.
			min.	max.	
0 W	6200 at -35	60 000 at -40	3.8	-	-
5 W	6600 at -30	60 000 at -35	3.8	-	-
10 W	7000 at -25	60 000 at -30	4.1	-	-
15 W	7000 at -20	60 000 at -25	5.6	-	-
20 W	9500 at -15	60 000 at -20	5.6	-	-
25 W	13000 at -10	60 000 at -15	9.3	-	-
20	-	-	5.6	< 9.3	2.6
30	-	-	9.3	< 12.5	2.9
40	-	-	12.5	< 16.3	2.9 (0W-40, 5W-40, 10W-40)
40	-	-	12.5	< 16.3	3.7 (15W-40, 20W-40, 25W-40, 40)
50	-	-	16.3	< 21.9	3.7
60	-	-	21.9	< 26.1	3.7

## Gear oils - except SAE J 306, 1998

Automotive Gear Lubricant Viscosity Classification			
SAE Viscosity Grade	Max. Temperature for Viscosity of 150,000 cP (°C)  Using ASTM D2983 Additional low-temperature viscosity requirements may be appropriate for fluids intended for use in light-duty synchronized manual transmission	Kinematic viscosity at 100 °C (cSt)	
		min. Limit must also be met after testing in CEC L-45-T-93, Method C (20 hours)	max.
70W	) 55  The precision of ASTM D2983 has not been established for determinations made at temperatures below ) 40 °C. This fact should be taken into consideration in any producer-consumer relationship.	4.1	)
75W	) 40	4.1	)
80W	) 26	7.0	)
85W	) 12	11.0	)
80	)	7.0	< 11.0
85	)	11.0	< 13.5
90	)	13.5	< 24.0
140	)	24.0	< 41.0

