

SPECIAL HEAVY-DUTY MOTOR OILS

SAE 10W, 20W-20, 30, 40, 50

SAE Grade	<u>Typical Properties</u>				
	10W	20W-20	30	40	50
Automotive					
Viscosity, cSt					
At 40° C	42	72	114	155	233
At 100° C	6.5	8.8	11.8	15.1	18.7
Viscosity, SUS					
At 100° F	210	363	560	800	1100
At 210° F	48	56	65	77	93
Viscosity Index	+90	+90	+90	+90	+90
Flash Pt.,(COC) °F	+400	+420	+435	+450	+465
Pour Point, °F	-25	-20	-5	0	+5
Sulfated Ash, %wt	<1.0	<1.0	<1.0	<1.0	<1.0
Neut. No., TBN-E (min)	7.5	7.5	7.5	7.5	7.5
Gravity, API @ 60F	27.9	27.2	26.5	25.5	24.9

The values shown are typical of current production. Some are controlled in the manufacturing process, while others are not. All of them may vary within tolerable ranges.

These HDMOs (Heavy Duty Motor Oil) SAE Single-Grade crankcase oils are formulated for diesel and gasoline engines. These oils are blended from selected and highly refined base stocks. They are compounded with detergents, dispersants, wear control elements, anti-oxidants, corrosion inhibitors, and a foam suppressant additive.

APPLICATIONS

Recommended for all major automotive diesel and four-cycle gasoline engines in all services and under all operating conditions. SAE grades 30, 40, and 50 meet former API Service Classifications CF, CF-2. SAE Grades 10W and 20W meet former API Service Classification CF. All comply with obsolete API classifications CD, CD-II, CE. These products meet the performance requirements of MIL-PRF-2104G (SAE 10W, 30, 40), MIL-L-2104B, MIL-L-46152D and conform to all major automobile manufacturers' and automotive/truck diesel engine builders' requirements, including Caterpillar, Cummins, Detroit Diesel-Allison, and Mack Truck. SAE 10W thru SAE 30 meet the Allison Type C-3, C-4 transmission performance requirements recommended for hydraulic systems.

[Do not use in EMD Diesel Engines (railroad, marine) which requires oil with <10 ppm zinc content].