



PRODUCT SPECIFICATIONS & TECHNICAL DATA

SAE 10w, 30wt, 40wt, 50wt HEAVY-DUTY MOTOR OILS

SAE 10w, 30, 40, 50 HEAVY DUTY MOTOR OILS, are mixed fleet engine oils formulated to provide optimum performance in modern, low emission diesel engines operating under a wide variety of service conditions. They are blended with premium base stocks and high-quality additive to achieve the following benefits: high temperature piston deposit control, foam protection, soot dispersancy and oil thickening control, oxidation inhibition, low temperature sludge protection, corrosion and rust inhibition, valve train wear protection and TBN retention. Formulated with advanced additive technology, they provide excellent control of deposits and sludge, minimizing oil consumption and optimizing engine overhaul intervals.

SAE 10w, 30, 40, 50 HEAVY DUTY MOTOR OILS, are recommended for use in turbo-charged and naturally aspirated two and four cycle diesel engines. They may also be used in gasoline engines for the "mixed fleet" operator. These motor oils, provide excellent performance in local stop and go routes, on and off highway, farm construction and mining applications.

Recommended for use in farm machinery, construction equipment, marine, two- and four-stroke diesel engines, and other off-highway applications where the SAE 10w, 30, 40 or 50 grades are specified by the OEM.

SAE VISCOSITY GRADE

API CF-4, CF-2 CH	10W, 30WT, 40WT, 50WT
API CF	10W, 30WT, 40WT, 50WT
API SL, SJ	10W, 30WT, 40WT, 50WT
API SH	10W, 30WT, 40WT, 50WT
DETROIT DEISEL SERIES	
2000/4000	30WT, 40WT, 50WT
NAVISTAR	30WT, 40WT, 50WT
MIL-L-2104G	10W 30WT, 40WT, 50WT
MIL-A-A-52306 CID	10W 30WT, 40WT, 50WT
ALLISON C-4	10W 30WT, 40WT, 50WT
CATERPILLAR CD-TO-2	10W 30WT, 40WT, 50WT



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TYPICAL PROPERTIES	10w	30wt	40wt	50wt
Gravity, API	29.7	27.3	27.0	26.4
Viscosity @ SUS 100F.	225	568	782	1004
Viscosity @ SUS 210F.	48	68	82	95
Viscosity Index	121	108	105	101
CCS Viscosity @-20°C Cp	2500	--	--	--
CCS Viscosity @-15°C Cp	--	--	--	--
Pour Point F.	-15	0	+5	+10
Total Base No. (ASTM D-2896)	9.3	9.3	9.3	9.3

The values quoted above are typical of current production and do not constitute a specification.

Minor variations that do not affect product performance are to be expected during normal manufacture.

Due to continual product research and development the product formulations are subject to change without notifications.

