

## FORCE SUPERDUTY SAE 10W,30,40,50 API SERVICE CF/SF

### DESCRIPTION

FORCE SUPER DUTY Series are heavy duty diesel oil formulated from high viscosity index base oil and balanced additive system.

FORCE SUPER DUTY Series offer protection against wear and corrosion and effective deposit control.

FORCE SUPER DUTY Series are suitable for turbocharged, supercharged, or naturally aspirated high speed diesel engines for transportation, heavy equipment, industry or marine application.

FORCE SUPER DUTY 10W and SUPER DUTY 30 are recommended for transmission and hydraulic system of heavy duty machineries.

### APPLICATION

FORCE SUPER DUTY Series are API CF (approved for SUPER DUTY 30, 40, 50) / CF2, MB-Approval 228.0 (SUPER DUTY 40) and MB-Approval 235.12, and Komatsu KES 07.851.2000 (SUPER DUTY 40).

FORCE SUPER DUTY Series also meets specification of ACEA E2-96, CAT TO-2, MIL-L-2104D and MIL-L-46152B.

FORCE SUPER DUTY and 30 are meet Allison C-4 specification.

### BENEFITS

Excellent TBN retention effectively neutralizing the acidic by-products of combustion with excellent high temperature piston cleanliness and deposit-free turbocharger deposits.

Outstanding thermal stability and oxidation resistance to maintain excellent engine cleanliness.

### PERFORMANCE

API CF/CF2/SF

MB 228.0 & 235.12

MTU Type I

MAN 270

KES 07.851.2000

ACEA E2-96

### TYPICAL RESULT

Characteristics	Test Method	SUPER DUTY 10W	SUPER DUTY 30	SUPER DUTY 40	SUPER DUTY 50
SAE Viscosity Grade	J-300	10W	30	40	50
Density at 15°C, kg/l	ASTM D - 4052	0.8832	0.8921	0.8953	0.9
Kinematic Viscosity at 40°C, cSt	ASTM D - 445	37.7	98.6	143.8	235.5
	ASTM D - 445	6.24	11.2	14.4	19.92
Viscosity Index	ASTM D - 2270	113	99	98	97
Color	ASTM D - 1500	L3.5	L3.5	L3.5	L4.0
Flash Point, °C	ASTM D - 92	230	236	244	244
Pour Point, °C	ASTM D - 97	-32	-12	-12	-9
Total Base Number, mg KOH/g	ASTM D - 2896	10.6	10.8	10.8	10.88