

# AGIP SIGMA TURBO



AGIP SIGMA TURBO is long-drain multigrade oil (S.H.P.D.) for supercharged diesel engines operating under severe duty. The oil can also be used in normally-aspirated diesel engines installed in vehicles engaged on urban and short-haul goods and passenger service, as well as in supercharged diesel car engines, providing a very wide quality margin. It permits long oil drain intervals.

## CHARACTERISTICS (TYPICAL FIGURES)

### AGIP SIGMA TURBO

Characteristics	ASTM	Unit	SAE GRADE
			15W-40
Density at 15°C	D 4052	kg/l	0.888
Viscosity at 100°C	D 445	cSt	14.9
Viscosity at 40°C	D 445	cSt	110
Viscosity Index	D 2270		140
Flash Point, COC	D 92	°C	226
Pour Point	D 97	°C	-24
Base Number	D 2896	mg KOH/g	11.2

## PERFORMANCE LEVEL

AGIP SIGMA TURBO is officially approved or meets the requirements of the following services and specifications:

- API SERVICE CG-4/SG
- ACEA E3, B3
- MB 228.3 Quality
- CCMC G4,D4,D5,PD2
- MACK EO-K/2
- MACK EO-L
- CATERPILLAR 1N
- MAN 271
- MAN 3275
- VOLVO VDS 2
- MTU TYP 2

## TECHNICAL ADVANTAGE

- The product exhibits marked resistance to deterioration, especially from oxidation which can be caused by prolonged high-temperature operation in the presence of air and other agents.
- The superior quality of the base stock used and the large percentage of additives adopted permit very long life between oil drains. Some manufacturers approve double the normal oil-service periods when AGIP SIGMA TURBO is used in their normally-aspirated and supercharged diesel engines.
- The multigrade properties of this oil make it suitable for use in all ambient temperature conditions.

- Its detergent-dispersant properties, combined with its very high, long-lasting ability to neutralize acidic products of combustion, keep pistons exceptionally clean, while solid combustion products are held in suspension, thus preventing the formation of harmful crankcase deposits.
- These properties are ensured by a special combination of low-ash additives, exceed the requirements issued by all manufacturers of four-stroke diesel engines.
- Its antioxidant, antirust and antiwear properties are designed for heavy duty service and to ensure very long oil-drain intervals Oxidation is effectively minimized, thus preventing viscosity variations. All the metal parts of the engine are protected in this way and wear is reduced, ensuring maximum engine efficiency throughout its life.

### APPLICATION

AGIP DIESEL SIGMA TURBO is specifically designed and formulated for :

- 4 stroke diesel engines, includes supercharged, turbocharged and heavy equipment engines such as bulldozer, wheel loader, motor grader, tractors etc.
- High speed static and marine diesel engines.
- Transmission and Gear to fulfill Allison C4, Caterpillar TO-2 and OEM requirement.