## **Product Information**



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## All-Fleet™ engine oil

105/03

**All-Fleet engine oil** is a high performance universal mixed fleet oil, recommended for gasoline, LPG and diesel engines. This oil is specially engineered to provide extra protection to those vehicles operating under the severe service demands of mixed fleets. Selected additives help minimize sludge formation caused by frequent stop-and-go driving conditions, thereby helping to reduce engine wear. Additional benefits include soot dispersancy and piston deposit control which helps keep engines cleaner. All-Fleet engine oils are also recommended for off-the-road vehicles, taxi cabs, police cars, and light trucks (vans) and pleasure boats.

## The All-Fleet engine oil advantages:

**Wear protection:** Strong oil film protects the engine against wear and corrosion.

**Engine cleanliness:** Keeps the engine clean and in good condition.

Break down resistance: Thermal and oxidation stable oil film.

Multi-purpose: Suitable for mixed fleet operation.

**OEM approved engine oil:** Recommended and approved by major engine manufacturers.

Approvals/performance levels	Viscosity Grade		
API CG-4/CF-4	15W-40	20W-50	
API SJ	15W-40		
ACEA A2-96/3, B3-98/2	15W40		
ACEA A2-96/3, B2-98/2		20W-50	
ACEA E2-96/4	15W-40	20W-50	
Mercedes-Benz 228.1	15W-40	20W-50	
Mercedes-Benz 229.1	15W40		
Volkswagen 505.00 (1/97)	15W-40		
MAN 271	15W-40	20W-50	
Volvo VDS	15W-40		
Mack EO-L	15W-40		
MTU Typ 1	15W-40		

Typical Properties	15W40	20W50	
Viscosity, mm <sup>2</sup> /s @ 100 °C	14.1	18.1	
Viscosity, mm <sup>2</sup> /s @ 40 °C	103	164	
Viscosity Index	143	125	
Viscosity, mPa.s −20 °C	<7000		
Viscosity, mPa.s -15 °C		<9000	
Sulphated Ash, wt. %	1.03	1.05	
TBN; mg KOH/g (ASTM D-2896)	8.3	8.5	
Pour Point, °C (D-97)	-33	-27	
Specific Gravity @ 15/15°C	0.872	0.887	
Flash Point, COC, °C	226	224	

This information only applies to products manufactured in the following location(s): Europe

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