

**EMD/TRANS SAE 20W-40 & SAE 40
ENGINE OILS for
MARINE & INDUSTRIAL APPLICATIONS
17 TBN/ASTM D-2896**

Typical Properties

SAE Grade		
Engine Class	20W-40	40
Viscosity, cSt		
At 40 C	126	182
At 100 C	14.8	14.6
Viscosity Index	120	73
Flash Point, (COC) Deg F	455	465
Pour Point, Deg F	-5	0
TBN, ASTM D 2896	17	17
Ash, %wt.-Sulfated	1.7	1.7
Zinc Content, ppm	<10	<10
Gravity, API @ 60 F	26.5	24.0

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.

The multigrade engine oil is a high-dispersancy, high-alkalinity crankcase oil for marine/ diesel engines compounded from paraffinic-based mineral oil utilizing a very shear stable dispersant viscosity improver. The SAE 40 grade is manufactured from a blend of solvent refined paraffinic and naphthenic base oils. Both grades contain detergent, dispersant, anti-wear, anti-oxidant, corrosion inhibitor, and foam-suppressant additives. The additives used do NOT contain 'zinc-compound' derivatives.

APPLICATIONS

The SAE 20W-40 grade is suggested for service where the customer desires the wide temperature characteristics of multigrade oils for use in Electro-Motive Division of General Motors Corporation (EMD), Caterpillar, and other diesel engines operating on higher than normal sulfur distillate-fuel where sulfated ash of +1% is acceptable. Also highly recommended for medium speed industrial engines which a multigrade oil is the preferred product. Meets API Service Classification Level "CD". The SAE 40 grade meets API Service Classification CD and CD-II, and the performance requirements for the Caterpillar TO-2 specification.