

STERN EMD 40 13 TBN Locomotive Engine Oil P-Series

LUBRICANTS

Outstanding high-dispersancy, high-alkalinity crankcase oil for railroad and marine diesel engines. SAE Grades 30 and 40 are compounded from MVI Base (Mixed-Base/Paraffinic-Napthenic) Oils to reduce hard carbon deposit formation in the ring belt area to minimize port blocking in 2 stroke cycle diesel engines. Multigrade 20W-40 is formulated with a shear stable VI Improver to provide better oil flow and lubrication at lower temperatures. All SAE grades contain detergent, dispersant, anti-wear, anti-oxidant, corrosion inhibitor, and foam-suppressant additives. The additive system used does NOT contain 'zinc-compound' derivatives.

APPLICATIONS

Recommended for use in Electro-Motive Division of General Motors Corporation (EMD), Caterpillar, General Electric, and other diesel engines operating on higher than normal sulfur distillate-fuel where sulfated ash of +1% is acceptable. The SAE straight grades are highly recommended for medium speed industrial engines such as Fairbanks-Morse opposed-piston (OP) engines for which a medium viscosity index oil is the preferred product. In many marine applications this product can be used in both main propulsion engines as well as auxiliaries. Meets API Service Classification Level "CF" and obsolete "CD".

TYPICAL PROPERTIES

<i>EMD/Trans Engine Oil Marine/Railroad & Industrial</i>	<i>SAE 40</i>
<i>Viscosity (cSt) at 40°C</i>	180
<i>Viscosity (cSt) at 100°C</i>	14.5
<i>Viscosity Index</i>	77
<i>Flash Point, (COC), °F</i>	465
<i>Pour Point, °F</i>	0
<i>TBN, ASTM D 2896</i>	13
<i>Ash, %wt.- Sulfated</i>	1.5
<i>Zinc Content, ppm</i>	<10
<i>Gravity, API @ 60°F</i>	24