



STERN EMD 20W-40 17 TBN Locomotive Engine Oil P-Series

LUBRICANTS

STERN 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, and 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.

TYPICAL PROPERTIES

| EMD 20W-40 17 TBN Locomotive Engine Oil | 20W-40 |
|--|---------------|
| <i>Viscosity (cSt) at 40°C</i> | 126 |
| <i>Viscosity (cSt) at 100 °C</i> | 14.8 |
| <i>Viscosity Index</i> | 120 |
| <i>Flash Point, (COC), °C/°F</i> | 455 |
| <i>Pour Point, °C/°F</i> | -5 |
| <i>TBN, ASTM D 2896</i> | 17 |
| <i>Ash, %wt.- Sulfated</i> | 1.7 |
| <i>Zinc Content, ppm</i> | <10 |
| <i>Gravity, API @ 60°F</i> | 26.5 |