

## UNITED EMD RAILROAD & MARINE OIL

United EMD Railroad & Marine Oil is made from selected highly refined base oils and blended with field-proven additives. This product is zinc-free and chlorine-free that meet the requirement of both General Electric and General Motors (Electro-Motive Division).

United EMD Railroad & Marine Oil prevents hard carbon formation in the ring belt area. It contains detergent-dispersant, non-zinc anti-wear additive, oxidation, corrosion and foam inhibitors. High TBN effectively neutralizes acids where high sulfur fuels are used. Suitable for medium speed 2-stroke and 4-stroke diesel engines in a wide range of railroad, marine, and stationery power engine where silver faced turbo charge bearings and wrist pin may be encountered.

### APPLICATIONS / BENEFITS

- Zinc free formulation protects silver bearings against corrosion for EMD engine.
- High oxidation stability minimizes sludge and deposit formation.
- Excellent detergency and dispersancy provides superior engine cleanliness.
- Excellent in-service retention of TBN facilitates extended drain intervals.

### TYPICAL CHARACTERISTICS

TEST DESCRIPTION	METHOD	TYPICAL RESULTS	
SAE Viscosity Grade	SAE J 300	SAE 40	SAE 40
Specific Gravity @ 15 °C	ASTM D 4052	0.895	0.900
Flash Point, °C	ASTM D 92	238	235
Pour Point , °C	ASTM D 97	-12	-12
Kinematic Viscosity @40°C	ASTM D 445	142	145
@100°C	ASTM D 445	14.5	14.7
Viscosity Index	ASTM D 2270	100	101
TBN, (mgKOH/g)	ASTM D 2896	13.0	17.0
Color	ASTM D 1500	<3.5	<4.5

### MEETS THE REQUIREMENTS OF

- API CF-2, CF, CD
- LMOA Generation V
- General Electric Generation IV Long Life
- Caterpillar 3600 for Mixed Fleet Operation