



EMD Railroad & Marine Engine Oil

Hartland EMD Railroad and Marine Engine Oils are superior quality engine oils designed to meet the severe requirements of modern high output, turbo-charged, medium speed, two cycle and four cycle marine diesel engines. These engine oils provide high total base numbers (TBN) and contain extra levels of detergents and dispersants to control deposits and protect critical engine parts from wear. Available in high VI (SAE 20W-40) and mid-VI (SAE 40) grades.

Features:

- Superb engine cleanliness and freedom from sludge through extra levels of dispersants and detergents.
- High TBN and excellent Base Number retention.
- Saves on fuel costs (20W-40) and reduces oil consumption.
- Excellent viscosity stability and oxidation control to allow longer oil service life.
- Extra levels of anti-wear additives to protect bearing and cylinders.
- Improved low temperature performance (20W-40).
- Commonly used in EMD or locomotive-type diesel engines where a zinc-free generation 4 lubricant is required.

Applications:

- Meets requirements for Caterpillar Marine Engines.
- Exceeds API CD quality performance.
- Provides superior performance in older EMD, GE and Caterpillar engines.

Typical Properties	SAE 40W	20W-40
Gravity, °API D287	23	26
Flash Point, °F (°C) D92	420(216)	420(216)
Viscosity, cSt D445		
@ 40°C	178	135
@ 100°C	13.6	15.2
Viscosity, SUS D2161		
@100°F	950	765
@210°F	74	79
Viscosity Index D2270	75	115
Pour Point, °F (°C) D97	10(-12)	10(-12)
Color D1500	D8	D8
Total Base Number D2896	17	17
Sulfated Ash, % D874	1.6	1.9

The values shown here are representative of current production. Some are controlled by manufacturing specifications, while others are not. All of them vary within modest ranges.