



Product Bulletin

DDS PLUS 9124 FM 9 TBN SAE 40 RAILROAD ENGINE OIL

BRAD PENN[®] DDS Plus 9124 FM 9 TBN SAE 40 Railroad Engine Oil represents the latest advancement in zinc free railroad diesel engine oil technology. It is a unique '**Functionalized Monograde[™]**' (**FM**) formulation that maintains the reduced oil consumption cost savings of a multi-viscosity engine oil while providing improved performance characteristics.

BRAD PENN[®] DDS Plus 9124 FM 9 TBN SAE 40 Railroad Engine Oil is designed to meet the changing needs of today's railroad diesel engines in light of progressive emission standards and the use of low sulfur and ultra low sulfur fuels. It offers reduced SAPS (sulfated ash, phosphorous and sulfur), advanced detergency and dispersancy technology and increased yellow metal anti-wear protection critical to satisfactory operation and long component life of exhaust aftertreatment devices such as particulate filters and oxidation catalysts. The exceptional Total Base Number retention and oil consumption reduction characteristics of the oil are directly linked to its superior oxidation control, viscosity retention, shear stability, acid production control and wear protection. **BRAD PENN[®] DDS Plus 9124 FM 9 TBN SAE 40 Railroad Engine Oil** offers the highest levels of oil performance and quality to insure superior engine productivity, maximum power utilization and reduced life-cycle maintenance costs.

BRAD PENN[®] DDS Plus 9124 FM 9 TBN SAE 40 Railroad Engine Oil is specifically designed for use in medium-speed two-cycle and four-cycle diesel engines such as those typically employed in railroad locomotives and certain marine applications. Approvals and specifications include:

- LMOA Generation VI
- General Electric Generation 4, Long Life
- Internal Listing with Electro-Motive Diesel (EMD)

BRAD PENN[®]
DDS Plus 9124 FM 9 TBN SAE 40 Railroad Engine Oil
Typical Properties

	Test Method	
SAE Grade		40
Gravity, API	ASTM D-4052	27.8
Density, lbs/gal (g/L)	Calculated	7.397 (886)
Viscosity, cSt @ 40°C	ASTM D-445	137
Viscosity, cSt @ 100°C	ASTM D-445	14.7
Viscosity Index	ASTM D-2270	106
Pour Point, °F (°C)	ASTM D-5949	0 (-18)
Flash Point, °F (°C)	ASTM D-92	450(232)
Color	ASTM D-1500	Opaque
TBN, (mg KOH/g)	ASTM D-2896	9.2
Sulfated Ash, mass %	ASTM D-874	1.0
Zinc, ppm (max)	Method 16	10
KF Moisture, ppm (max)	ASTM D-6304	1000
Product Code		7272