

## **RAILROAD POWER 413**

## **Diesel Locomotive Engine oil**

**RAILROAD POWER 413** is a high performance, zinc-free and chlorine-free oil specially designed to provide excellent engine cleanliness and oil filter life in the modern railroad diesel locomotive engines.

**RAILROAD POWER 413** is based on high quality virgin mineral base oil in combination with an unique additive package to ensure the following properties:

- Exceptional detergency and dispersancy provides excellent engine cleanliness, especially engine top decks.
- Excellent retention of TBN facilitates extended drain intervals.
- High thermo-oxidative stability.
- Zinc-free formulation protects silver bearings against corrosion.
- Non-chlorinated additive package helps in reducing used oil disposal costs.

## **RAILROAD POWER 413** meets the following performance criteria:

API CF/CF-2	LMOA Generation 5	EMD of General Motors
GE Diesel Engines	GE as Generation 4 Long Life Oils	Caterpillar 3600

## **Typical Analysis**

Properties	Unit	Method	Typical Value
SAE Grade		SAE J300	40
Density @15°C	kg/m³	ASTM 4052	895.9
Kinematic Viscosity @ 40°C	mm²/s	ASTM D7042	1551
Kinematic Viscosity @ 100°C	mm²/s	ASTM D7042	15.6
Viscosity Index		ASTM D2270	102
Flash Point COC	°C	ASTM D92	>201
Pour Point	°C	ASTM D7346	-24
Total Base Number	mgKOH/g	ASTM D2896	13,8
Sulphated Ash	%Wt	ASTM D874	1.5
Date Issued: 15-5-2025	Supersedes: 16-6-2021 Revision Nr.: 02		