## PRODUCT INFORMATION



### **TITAN RAILGEN 13 SAE 40**

High Performance Rail Locomotive Monograde Engine Oil according to API CF utilizing zinc and chlorine free additive technology.

#### **Description**

TITAN RAILGEN 13 SAE 40 is a monograde high performance, API CF level lubricating oil specialty formulated to meet the requirements of Rail Locomotive diesel engines. TITAN RAILGEN 13 SAE 40 provides the necessary extra alkalinity to effectively neutralize acidic by-products of combustion during operation and gives a high level of detergency to keep pistons and piston rings free of deposits.

#### **Application**

TITAN RAILGEN 13 SAE 40 is blended with the latest Zinc and Chlorine free additive technology, developed especially for use in Rail Locomotive diesel engines.

The zinc free additive technology is especially compatible to engines with silver bearings. The absence of chlorine in the formulation is beneficial for the environment and eases disposal and recycling of the used fluid.

The additive system has been extensively tested in GE, LMOA & Caterpillar engines with good field results.

TITAN RAILGEN 13 SAE 40 is miscible and compatible with conventional branded monograde engine oils. However, mixing with other monograde engine oils should be avoided in order to fully utilize the products benefits. A complete oil change is recommended when converting to TITAN RAILGEN 13 SAE 40. For more information on product safety and proper disposal please refer to the latest Material Safety Data Sheet.

#### Advantages/Benefits

- The use of TITAN RAILGEN 13 SAE 40 will ensure protection of the engine and all of its critical components
- TITAN RAILGEN 13 SAE 40 is fully inhibited for protection against corrosion
- TITAN RAILGEN 13 SAE 40 has a high level of oxidation resistance to prevent premature ageing and to give longer oil life.
- TITAN RAILGEN 13 SAE 40 offers optimum alkalinity to neutralize acidic by products of combustion e.g. when the diesel fuel contains sulfur
- TITAN RAILGEN 13 SAE 40 utilizes zinc and chlorine free additive technologies

#### **Specifications**

API CD/CF

#### **Approvals**

- GE Generation 4LL
- GM EMD GENERATION 5

#### **FUCHS Recommendations**

- LMOA GENERATION 5
- CATERPILLAR 3600

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#### **CHARACTERISTICS**

Density at 15 ℃	DIN 51757	0.892 g/ml
Kinematic Viscosity at 40℃	DIN 51562-1	146.45 mm²/s
Kinematic Viscosity at 100℃	DIN 51562-1	14.91 mm²/s
Viscosity Index	DIN ISO 2909	102
Pour Point	DIN ISO 3016	-9 ℃
Total Base Number	DIN ISO 3771	13 mgKOH/g

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The information contained in this product information is based on the experience and know-how of FUCHS EUROPE SCHMIERSTOFFE GMBH in the development and manufacturing of lubricants and represents the current state-of-the-art. The performance of our products can be influenced by a series of factors, especially the specific use, the method of application, the operational environment, component pretreatment, possible external contamination, etc. For this reason, universally-valid statements about the function of our products are not possible. The information given in this product information represents general, non-binding guidelines. No warranty expressed or implied is given concerning the properties of the product or its suitability for any given application.

We therefore recommend that you consult a FUCHS EUROPE SCHMIERSTOFFE GMBH application engineer to discuss application conditions and the performance criteria of the products before the product is used. It is the responsibility of the user to test the functional suitability of the product and to use it with the corresponding care.

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