

## TITAN TRAIN

High Quality zinc free oil for medium speed high output locomotive diesel engines

### Description

Titan Train is blended from high quality virgin base oils and effective detergents & dispersants to provide protection against sludge and deposit formation. Oxidation and corrosion inhibitors enhance the life of the oil while anti-wear and anti-foam additives help prevent excessive engine wear and foaming.

### Application

Titan Train may be used in a wide range of applications including locomotives and auxiliary stationary engines.

- These oils are also suitable for marine applications, tugboats and workboats.
- They are especially applicable for EMD, GE Bombardier, CAT, Detroit Diesel (2 cycle engines on high sulphur fuel) and other medium-speed diesel engines.
- Titan Train is recommended when diesel sulphur content is less than 0.7% wt

### Advantages/Benefits

- **Silver-Alloy compatible:**  
Zinc free oil, especially formulated for engines having Silver-alloy bearings.
- **Engine cleanliness**  
Provides perfect engine and piston cleanliness and prevents the engine from deposits, sludge and adhesion, be it under long-term high load or start-stop-driving conditions.
- **Engine protection**  
Reliable protection against wear and bore polishing, even under on-going high load conditions
- **Corrosion protection**  
Offers high alkaline reserves to neutralise acids and to protect against corrosion.

### Specifications

- API CF/CF-2

### FUCHS Recommendations

- EMD (Electro-Motive Division of GM)
- Caterpillar 3600
- GE Generation 4
- LMOA Generation 5

## CHARACTERISTICS

### TITAN TRAIN SAE 40 (TBN 13)

Density @ 35 °C	0.888	g/ml	ASTM D 4052
Flash Point, CoC	252	°C	ASTM D 92
Pour Point	-15	°C	ASTM D 97
Kinematic Viscosity @ 40 °C	160	mm <sup>2</sup> /s	ASTM D 445
Kinematic Viscosity @ 100 °C	15.5	mm <sup>2</sup> /s	ASTM D 445
Viscosity index	98	-	ASTM D 2270

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While the information and figures given here are typical of current production and confirm to specification, minor variations may occur. No warranty expressed or implied is given concerning the accuracy of the information or the suitability of the product

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ISO 9001:2008  
ISO 14001:2004  
OHSAS 18001:2007  
CERTIFIED





## TITAN TRAIN SAE 50 (TBN 13)

Density @ 35 °C	0.892	g/ml	ASTM D 4052
Flash Point, CoC	250	°C	ASTM D 92
Pour Point	-9	°C	ASTM D 97
Kinematic Viscosity @ 40 °C	250	mm <sup>2</sup> /s	ASTM D 445
Kinematic Viscosity @ 100 °C	20.5	mm <sup>2</sup> /s	ASTM D 445
Viscosity index	96	-	ASTM D 2270

## TITAN TRAIN SAE 40 (TBN 17)

Density @ 35 °C	0.898	g/ml	ASTM D 4052
Flash Point, CoC	254	°C	ASTM D 92
Pour Point	-15	°C	ASTM D 97
Kinematic Viscosity @ 40 °C	160	mm <sup>2</sup> /s	ASTM D 445
Kinematic Viscosity @ 100 °C	15.5	mm <sup>2</sup> /s	ASTM D 445
Viscosity index	98	-	ASTM D 2270

## TITAN TRAIN SAE 40 (TBN 20)

Density @ 35 °C	0.892	g/ml	ASTM D 4052
Flash Point, CoC	240	°C	ASTM D 92
Pour Point	-15	°C	ASTM D 97
Kinematic Viscosity @ 40 °C	156	mm <sup>2</sup> /s	ASTM D 445
Kinematic Viscosity @ 100 °C	15.6	mm <sup>2</sup> /s	ASTM D 445
Viscosity index	102	-	ASTM D 2270

## TITAN TRAIN SAE 50 (TBN 20)

Density @ 35 °C	0.890	g/ml	ASTM D 4052
Flash Point, CoC	260	°C	ASTM D 92
Pour Point	-9	°C	ASTM D 97
Kinematic Viscosity @ 40 °C	239	mm <sup>2</sup> /s	ASTM D 445
Kinematic Viscosity @ 100 °C	20.5	mm <sup>2</sup> /s	ASTM D 445
Viscosity index	100	-	ASTM D 2270

