FRANKFURT PETROLEUM

Diesel Engine Oil **Technical Data Sheet**

FP MOTORÖL TITANIUM 20W-50 CI-4

MINERAL

PRODUCT DESCRIPTION:
FP MOTORÖL TITANIUM CI-4 is a high-performance diesel engine oil that provides excellent lubrication to diesel engines. It maximizes performance in the latest US, European and Japanese heavy-duty diesel engines including severe applications such as high loads and multi trailer applications. It exhibits outstanding detergent, dispersant and anti-wear properties to keep the engine clean and enable efficient control of soot, sludge and piston deposits.

APPLICATION:
FP MOTORÖL TITANIUM CI-4 is Recommended for modern heavy-duty engines, wide range of turbo-charged and naturally aspirated diesel engines as well as all kinds of gasoline engines, all types of generators, trucks, construction machinery, passenger cars or mixed fleet comprising diesel and gasoline powered cars.

FEATURES & BENEFITS:

- High thermal and oxidation stability
- Reduced sludge build-up, deposits and viscosity increase
- Stay-in-grade shear stability
- Excellent low temperature properties
- Wear protection and viscosity control
- Improved viscosity control and oil pumpability

PERFORMANCE LEVELS: Meets or Exceeds:

API CI-4/SL, ACEA E7, A3/B3/B4, MB 229.1, MAN M3275-1, Deutz DQC III-10, JASO DH1, Cummins CES 20076/20077/78, Global DHD1, MTU Type 2, Allison C4, Caterpillar ECF 1a, ECF 2, DDC 93K215, DTFR 15B110, Volvo VDS-3, Mack EO-N, Renault VI RLD-2

TYPICAL PROPERTIES:

PARAMETERS	ASTM	UNIT	RESULT
Grade			20W-50
Kinematic Viscosity@ 104°F /40°C	ASTM D7042	cSt	173
Kinematic Viscosity@ 212°F /100°C	ASTM D7042	cSt	20.4
Viscosity Index	ASTM D2270	-	137
SP. Gravity @15°C/60°F	ASTM D4052	g/cm^3	0.890
Flash Point	ASTM D92	°C	236
Pour Point	ASTM D97	°C	-24
TBN	ASTM D2896	mg KOH/g	11.4
CCS, (°C)	ASTM D5293	m.Pa.S	<9500 (-15°C)

HEALTH & SAFETY, ENVIRONMENT:
Prolonged and repeated contact with oil may cause skin disorders. Avoid contact. Wash immediately with soap and water. Do not discharge used oil in to drains or the environment. Dispose to an authorized used oil collection point.