

MAK CF4

Heavy duty multigrade engine oil for stationary diesel engines

MAK CF4 is a very high quality heavy duty multigrade diesel engine oil. It is developed to meet the lubrication requirements of heavy duty stationary diesel engines operating under challenging conditions. This oil is formulated with high quality severely hydro processed Group II plus base oils and highly effective performance additives. MAK CF4 is designed to improve engine and oil durability with the help of superior quality viscosity index improver and unique detergent-dispersant additive. It offers exceptional performances in terms of oxidation control, engine cleanliness and wear protection of heavily loaded engine components like valve train etc.

Applications:

MAK CF4 is recommended for use in turbo charged and naturally aspirated stationary diesel engines. They are suitable for Construction, Mining, and Agricultural Equipment diesel engines where API CF-4, SAE grade 15W-40 oil is recommended.

Performance/ Benefits:

Engine Protection – offers improved wear protection in the critical areas of engine like valve train, cylinder liner and piston rings. Improves durability and reliability of engine.

Superior Deposit Control – balanced blend of detergents and dispersants cleanse engine components. Offers superior control of sludge and harmful deposit formation. Maintains optimum engine performance and enhances oil life.

Excellent Thermo-Oxidative Stability – excellent resistance to oil breakdown and deposit formation under high temperatures and aggressive driving conditions. Controls oil thickening. Extends oil life.

Reduced Oil Consumption – high quality base oils with lower volatility have potential of lower oil consumption.

Excellent Shear Stability – ensures viscosity control at high temperatures and high shear conditions to offer protection.

Good TBN Retention – offers long-term protection against corrosion of ferrous and non-ferrous metals.

Excellent Lubrication – the multigrade viscometry of the engine oil offers excellent lubrication and makes the engine run smoother.

Performance Level/ Specification:

Meets the performance benchmarks of

- API CF-4/ SG
- IS 13656:2002 Type EDL5 (Reaffirmed 2014)

Typical Physico-Chemical Data: MAK CF4

Characteristics	Method	Value
SAE Grade	SAE J300	15W-40
Color	Visual	Brown
Appearance	Visual	Clear
Density @29.5°C, g/cc	ASTM D1298	0.8788
Kinematic Viscosity @40°C, cSt	ASTM D445	106.8
Kinematic Viscosity @100°C, cSt	ASTM D445	14.20
Viscosity Index	ASTM D2270	135
Copper Corrosion, 100°C, 3 hrs.	ASTM D130	1a
Flash Point, °C	ASTM D92	232
Pour Point, °C	ASTM D97	-24
Foaming Tendency	ASTM D892	
a) Sequence I		Nil/Nil
b) Sequence II		10/Nil
c) Sequence III		Nil/Nil

Storage & Handling:

The product should be stored inside. Keep it properly sealed to avoid contamination. Avoid freezing and store under protected storage conditions.

Health & Safety:

It is unlikely to be hazardous when properly used in recommended applications. Contamination of the oil from other oils, greases, chemicals, dirty water etc. can occur during the use. It should be avoided. Regular monitoring of the in-use product is recommended.