Product Data Sheet

MAK GOLD PLUS 20W-40

Multigrade high performance heavy duty diesel engine oil

MAK Gold Plus 20W-40 is a heavy duty diesel engine oil blended from highly refined high viscosity index Group II plus base stocks. It is formulated to perform under the most stringent operating conditions for heavy duty diesel engines and assure outstanding protection against oil oxidation/degradation, oil thickening and corrosion. This oil has very good shear stability thereby maintain its viscosity under high shear & high temperature operations. MAK Gold Plus 20W-40 provides the highest level of protection for relatively older diesel engines, large or small, non-turbocharged or turbocharged diesel engines that require added wear protection and oil loss prevention of a higher viscosity engine oil.

Applications:
MAK Gold Plus 20W-40 is recommended for use in relatively older Naturally Aspirated/Turbo/Supercharged diesel engines meeting BS I and BS II norms of vehicles such as heavy duty trucks & buses, LCVs, tractors, gensets etc. This oil is suitable for diesel engines requiring oils such as CF-4, CF and CD performance level. Alternatively be guided by OEM's recommendation for oil drain period.

Performance/ Benefits:
Resistance to Oxidation and Thermal Degradation – enhanced high temperature stability offers superior protection for the engine oil at high temperature and controls sludge build-up and deposits formation.

Enhanced Engine Life – provides improved wear protection to cylinder liner, piston rings & valves, cams and other components over wide range of operating temperature.

Engine Cleanliness – high performance additives in the engine oil provides improved engine cleanliness and ensures consistent high performance of the engines.

Long Service Life – formulated with high quality Group II plus base oils that possess very low volatility thereby reduces the overall oil consumption/top-ups.

Excellent Shear Stability – ensures viscosity control at high temperatures and high shear conditions. Provides wear protection over a wide temperature range.

Good TBN Retention – offers excellent protection against corrosive wear of engine components due to high TBN retention over the oil life.

Multigrade Performance – multigrade viscosity is designed to provide easy engine start-up and minimal start-up wear.

Performance Level/ Specification:
Meets the performance benchmarks of

- API CF-4

Typical Physico-Chemical Data: MAK Gold Plus 20W-40

Characteristics	Method	Value
SAE Grade	SAE J300	20W-40
Color	Visual	Red
Appearance	Visual	Clear
Density @29.5^{O}C, g/cc	ASTM D1298	0.860
Kinematic Viscosity @40^{O}C, cSt	ASTM D445	122.45
Kinematic Viscosity @100^{O}C, cSt	ASTM D445	14.50
Viscosity Index	ASTM D2270	120
Copper Corrosion, 100^{O}C, 3 hrs.	ASTM D130	1a
Flash Point, ^{O}C	ASTM D92	232
Pour Point, ^{O}C	ASTM D97	-21
Foaming Tendency a) Sequence I b) Sequence II c) Sequence III	ASTM D892	 Nil / Nil 10 / Nil 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.

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