MAK 4T GE 20W-50

Oil for 4 stroke gas engine of Auto-Rickshaws

MAK 4T GE 20W-50 is high performance heavy duty gas engine oil specifically developed for 4 stroke and spark ignition engines of three wheelers running on CNG or LPG. It is blended from high viscosity index base stock. Special additive chemistry imparts excellent resistance to oxidation, nitration and thermal degradation of the oil. It provides excellent lubrication performance in challenging operating environments that usually auto rickshaws operate. MAK 4T GE 20W-50 is designed to help prevent knocking and thereby enable engines to run at full load and optimum efficiency. Viscosity control allows reduction in friction losses. It offers excellent protection to engine components against rust and corrosion. It is also designed to meet the demands of 'lean burn' technology employed by modern engines

Applications:
MAK 4T GE 20W-50 is recommended for use in latest generation 4 stroke 3 wheeler Auto rickshaws running on CNG or LPG fuel and encountering the most severe shear conditions for the engine oil due to the challenging operating conditions.

Performance/ Benefits:
Excellent Resistance to Oxidation and Nitration – outstanding resistance to oxidation and nitration. Resists viscosity increase, filter deposits and formation of acid. Minimises sludge formation, filter choking piston ring and valve sticking. Ensures reliability, longer drain period and less maintenance.

Excellent Antiwear Characteristics – protects critical engine parts like valve train components, pistons, liners, bearings and gear trains. Enhances engine performance and reliability.

Clean Engine – appropriate ash content controls deposits in combustion chamber, on pistons, valves and spark plugs to maintain maximum efficiency. Highly effective detergency and dispersancy additives control carbon and deposit formation maintain engine cleanliness.

Resistance to Rust & Corrosion – provides excellent protection from rust and corrosion.

Low Oil Consumption – low oil volatility formulation minimises evaporation, extends operating life and reduces top-up oil quantity.

Extended Drain Interval – enhances operating life of oil, controls viscosity, reduces sludge and deposits formation through high quality base stock and additive system. Increases engine availability.

Performance Level/ Specification:
- API SL
- JASO MA 2

Typical Physico-Chemical Data: MAK 4T GE 20W-50

Characteristics	Method	Value
SAE Viscosity	SAE J300	20W-50
Color	Visual	Brown
Appearance	Visual	Clear & Bright
Density @29.5^{O}C, g/cc	ASTM D1298	0.861
Kinematic Viscosity @40^{O}C, cSt	ASTM D445	164.5
Kinematic Viscosity @100^{O}C, cSt	ASTM D445	19.2
Viscosity Index	ASTM D2270	133
Copper Corrosion, 100^{O}C, 3 hrs.	ASTM D130	1a
Flash Point, ^{O}C	ASTM D92	258
Pour Point, ^{O}C	ASTM D97	-24
Total Base Number, mg KOH/ g	ASTM D2896	6.0
Sulfated Ash, wt%	ASTM D 874	
Foaming Tendency, ml 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 coolant 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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