



MAK 4T ROYAL

Premium semi-synthetic engine oil for high powered motorcycles

MAK 4T Royal is a premium quality semi-synthetic engine oil for lubrication of 4-stroke engines of high powered motorcycles. Extreme on-road performances accelerate engine wear and deteriorate engine oil due to high temperature, rapid oxidation and sludge formation. These engines offer high power and torque and require reliable oil performance under arduous conditions. MAK 4T Royal has the most advanced additive technology. A balanced blend of detergents, dispersants, oxidation inhibitors and anti-wear agents ensure reliable performance and protection. It also offers superior engine cleanliness and smoother clutch performance. MAK 4T Royal provides outstanding resistance to carbon deposits formation even at extreme operating conditions. It also helps reduce vibration and engine noise.

Applications:

MAK 4T ROYAL is designed for high powered motorcycles recommending SAE 15W-50 grade oils such as Royal Enfield motor cycles where it delivers the optimum power and maximum protection to engine components in all riding conditions.

Performance/ Benefits:

Resistance to Oxidation and Thermal Degradation – excellent resistance to oil breakdown under high temperatures and aggressive driving conditions. Prevents harmful deposit formation and controls oil thickening. Enhances engine and oil life.

Excellent Protection – premium additive technology offers high resistance to piston wear by offering sufficient oil film thickness for proper lubrication of engine at high temperatures. Extends engine life. Offers superior protection of gears during daily commuter duty.

Enhanced Control – optimised friction control ensures reduced wear of engine parts, smoother clutch engagement and gear changes.

Power Realisation – The additive system coupled with semi-synthetic technology provides superior lubrication of engine, clutch and gear. Ensure quick engine response and increasing power output.

Excellent Rust Protection and Seal Compatibility – offers excellent rust protection and reduced maintenance cost. Formulation is compatible with seal material and preserves elasticity of engine seals.

Excellent Deposit Control – superior oxidation control reduces sludge and varnish formation to provide a cleaner running engine which increases oil and engine life.

Driving Comfort – enhanced shear stability of the oil helps in better dampening of vibrations and reduces noise at peak engine speed.

Performance Level/ Specification:

- Exceeds API SL
- JASO MA2

Typical Physico-Chemical Data: MAK 4T Royal

Characteristics	Method	Value
SAE Viscosity Grade	SAE J300	15W-50
Color	Visual	Brown
Appearance	Visual	Clear and Bright
Density @29.5°C, g/cc	ASTM D1298	0.860
Kinematic Viscosity @40°C, cSt	ASTM D445	147.1
Kinematic Viscosity @100°C, cSt	ASTM D445	18.50
Viscosity Index	ASTM D2270	141
Copper Corrosion, 100°C, 3 hrs.	ASTM D130	1a
Flash Point, °C	ASTM D92	240°C
Pour Point, °C	ASTM D97	-24
Foaming Satbility Sequence I/ II/ III	ASTM D892	NIL

Storage & Handling:

The product should be stored inside. Keep it properly sealed to avoid contamination. Avoid freezing. Shelf life is 5 yrs. 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.