



MAK ALPHA ZENITH 10W-30

Premium synthetic engine oil for modern petrol and diesel engines

MAK Alpha Zenith 10W-30 is a premium synthetic engine oil developed to meet the challenging lubrication requirements of latest generation Petrol and Diesel engines. MAK Alpha Zenith 10W-30 is a unique engine oil formulated with the most advanced high quality base oils and additive technology to deliver longer life, outstanding protection to the engine and enhanced fuel economy. This oil is also designed to meet specific requirement of engine technologies (such as CRDI/ Quadrajet engines) used in passenger cars as against conventional IDI/ DI engine technology used in diesel engines of truck/ buses. It exhibits better soot handling capabilities and outstanding control over soot induced thickening.

Applications:

MAK Alpha Zenith 10W-30 is recommended for use in **automotive petrol or diesel engines** of latest generation Petrol and Diesel Passenger Cars, Multi-Utility Vehicles (MUVs) and Sport-Utility Vehicles (SUVs) where the manufacturer recommends an ACEA A3/B4, API CI-4/SL specification. Be guided by OEM's recommendation for oil drain period. **This engine oil is proven for 2% fuel economy, under test conditions, against 15W-40/ 20W-40/ 20W-50 viscometrics without compromising engine durability.**

Performance/ Benefits:

Fuel Economy Benefits – lower viscometry formulation offers superb fuel economy benefits over conventional 15W-40/ 20W-40/ 20W-50 grades without compromising on engine durability.

Outstanding Wear Protection – offers superior wear protection to engine, even under higher speeds and temperatures, ensures longer engine life and reduced maintenance cost. Improves durability and reliability of engine.

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

Excellent Low Temperature Flow Characteristics – excellent oil flowability ensures outstanding engine protection in all weather conditions and quick start-up.

Excellent Cleanliness – advanced additive technology provides outstanding engine cleanliness. Offers a cleaner running engine under challenging conditions.

Excellent Shear Stability – ensures viscosity control at high temperatures and high shear conditions. Provides enhanced protection.

Performance Level/ Specification:

Meets the performance benchmarks of

- API CI-4/SL
- ACEA A3/B4

Typical Physico-Chemical Data: MAK Alpha Zenith 10W-30

Characteristics	Method	Value
SAE Grade	SAE J300	10W-30
Color	Visual	Brown
Appearance	Visual	Clear
Density@ 29.5°C, g/cc	ASTM D1298	0.852
Kinematic Viscosity @100°C, cSt	ASTM D445	75.4
Kinematic Viscosity @100°C, cSt	ASTM D445	11.0
Viscosity Index	ASTM D2270	135
Copper Corrosion, 100°C, 3 hrs.	ASTM D130	1a
Flash Point, °C	ASTM D92	230
Pour Point, °C	ASTM D97	-27
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.