

# MAK ALPHA ZENITH 5W-30

Premium synthetic oil for modern petrol/ diesel/ CNG/ LPG driven cars

MAK Alpha Zenith 5W-30 is a premium synthetic engine oil designed to meet the challenging lubrication requirements of latest generation Petrol and Diesel engines of passenger cars. MAK Alpha Zenith 5W-30 is a unique engine oil formulated with the advanced high performance base oils and additive technology to deliver longer oil life, outstanding engine protection and enhanced fuel economy. MAK Alpha Zenith 5W-30 provides exceptional engine performance in latest technology new generation engines functioning on close tolerances and requires special low viscometry oils without compromising on engines durability and reliability. This oil offers outstanding shear stability characteristics under conditions of high temperature and high shear.

#### Applications:

MAK Alpha Zenith 5W-30 is recommended for use in modern passenger cars running on Petrol/ Diesel/ CNG/ LPG fuel where the OEM recommends ACEA A5/B5 or API SN 5W-30 engine oil. Be guided by OEM's recommendation for oil drain period.

#### Performance/ Benefits:

**Superb Fuel Economy Benefits** – the unique lower viscometry formulation offers superb fuel economy benefits without compromising on engine durability and reliability.

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

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

**Excellent Flow Characteristics** – the low viscometry formulation ensures excellent oil flowability and assures quick engine start-up, better pick-up and makes engine run smoother.

**Excellent Cleanliness** – carefully selected and finely balanced detergent and dispersant additive technology provides outstanding engine cleanliness thereby offering a cleaner running engine under challenging conditions.

**Excellent Shear Stability** – ensures viscosity control at high temperatures & high shear conditions thereby providing maximum protection.

#### Performance Level/ Specification:

Meets the performance benchmarks of

- API SN
- ACEA A5/B5

#### Typical Physico-Chemical Data: MAK Alpha Zenith 5W-30

| Characteristics                 | Method     | Value   |
|---------------------------------|------------|---------|
| SAE Grade                       | SAE J300   | 5W-30   |
| Color                           | Visual     | Brown   |
| Appearance                      | Visual     | Clear   |
| Density@ 29.5°C, g/cc           | ASTM D1298 | 0.842   |
| Kinematic Viscosity @40°C, cSt  | ASTM D445  | 61.5    |
| Kinematic Viscosity @100°C, cSt | ASTM D445  | 10.5    |
| Viscosity Index                 | ASTM D2270 | 162     |
| Copper Corrosion, 100°C, 3 hrs. | ASTM D130  | 1a      |
| Flash Point, °C                 | ASTM D92   | 230     |
| Pour Point, °C                  | ASTM D97   | -36     |
| 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.