

# **OPIS** series SAE 0W-40 - Fully Synth (PAO)

# Fully Synthetic high performance engine oil

Fully synthetic high-performance engine oil with extreme multi-grade properties for gasoline and diesel engines of passenger cars.

This top-quality motor oil satisfies the requirements of modern engines and is recommended for gasoline and diesel engines of passenger cars and light duty commercial vehicles.

Particularly suited for high thermal and mechanical loads.

### **Properties and features**

- Optimum lubrication reliability, also under hot and difficult operating conditions.
- Very good cold start properties for a rapid lubrication of the entire engine and consequently reduction of cold-start wear.
- Effective wear protection at high thermal stress as well as at low temperatures.
- Maximum thermal and shear stability.
- Very good engine cleanliness.
- The reduced friction values ensures better performance and lower oil consumption.

#### Use

Fully synthetic high-performance engine oil for modern low-emission gasoline and diesel engines in cars and light commercial vehicles. This oil is well suited for extreme driving conditions as well as for normal use. It is recommended for engines with and without turbochargers or multi-valve technology, as well as for diesel engines with or without direct fuel injection.

Observe manufacturer's specifications and instructions before use.

| Specifications          | Performance level: |  |
|-------------------------|--------------------|--|
| ACEA 2012: A3/B3, A3/B4 | BMW LL-01          |  |
| API SN, SM, SL/CF       | MB 229.5, 229.3    |  |
|                         | Porsche A40        |  |
|                         | VW 502 00, 505 00  |  |
|                         |                    |  |

| Technical data            | Unit                    | Method        |  |
|---------------------------|-------------------------|---------------|--|
| Density at 15°C           | 0.844 g/cm <sup>3</sup> | ASTM D 1298   |  |
| Viscosity at 40 °C        | 75 mm²/s                | ASTM D 445    |  |
| Viscosity at 100 °C       | 13.5 mm²/s              | ASTM D 445    |  |
| Viscosity index           | 180                     | ASTM D 2270   |  |
| Viscosity at – 35°C (CCS) | 5600 cP                 | ASTM D 5293   |  |
| HTHS-viscosity            | 3.6 mPa⋅s (cP)          | CEC-L-36-A-97 |  |
| TBN                       | 11.2 mgKOH/g            | ASTM D 2896   |  |
| Sulphated ash             | 1.2 % mass              | ASTM D 874    |  |
| Flash point C.O.C.        | 224 °C                  | ASTM D 92     |  |
| Pour point                | -48 °C                  | ASTM D 97     |  |
| NOACK evaporation loss    | 10.2 % mass             | CEC-L-40-A-93 |  |

# Health, safety and environment

ADR / SDR : Not dangerous EU Waste List Code: 13 02 08