

UNIVERSAL ENGINE OILS

TDS 591-2017



| Description of index | Standard values | | |
|---|-------------------------|-------------------------|-------------------------|
| | SAE 15W-30 API SF/CC | SAE 15W-40 API SF/CC | SAE 20W-50 API SF/CC |
| Kinematic viscosity at 100°C, mm ² /c, within | 11,0-12,5 | 13,5-15,0 | 18,5-20,5 |
| Dynamic viscosity at minus 20°C, mPa's, not more than | 7000 | 7000 | 9500 |
| Viscosity index, not less than | 120 | 120 | 120 |
| Mass fraction of mechanical impurities, %, not more than | 0,015 | 0,015 | 0,015 |
| Base number, mg KOH per 1g of oil, not less than | 6,0 | 6,0 | 4,0 |
| Mass fraction of sulfurate ash, %, not more than | 1,3 | 1,3 | 1,1 |
| Mass fraction of water, %, not more than | 0,03 traces | 0,03 traces | traces 0,03 |
| Flash point determined in an open cup, °C, not lower than | 210 | 210 | 220 |
| Pour point, °C, not higher than | minus 25 | minus 20 | minus 15 |
| Evaporation at 250 °C during 1 hour, %, not more than | 15 | 15 | 15 |
| Corrosion resistance on copper plate M1 at 100°C, 3 hours, points, not more than | 1B 1b | 1B 1b | 1B 1b |
| Color with dilution in the 15:85 ratio, ASTM color, not more CNT units, not more than | 4,0 4,0 | 4,0 4,0 | 2,5 2,5 |
| Density at 20°C, g/cm ³ , not more than | 0,900 | 0,905 | 0,900 |

NOTE - Sand and other abrasive substances are not allowed in mechanical impurities.