

# **Gulf Supreme Duty XLE**

Extra high performance diesel engine oil for low emission engines

## **Product Description**

**Gulf Supreme Duty XLE** series are extra high performance diesel engine oils specially developed for use in modern, high-output, low emission engines meeting US 2007 on-highway exhaust emission standards. These oils not only addresses the unique needs of these new engines and enhances the life of exhaust after treatment devices but also provides improved protection to older engines. These are formulated with state-of-the-art additive technology and severely hydroprocessed base oils to provide outstanding performance and overall protection. It exceeds the performance requirements of API CJ-4 and major global OEMs.

#### Features & Benefits

- Outstanding thermal and oxidative stability reduces low-temperature sludge build-up, high-temperature deposits and oil thickening
- Excellent soot handling minimizes soot related viscosity increase and leads to longer engine/oil life
- Outstanding corrosive and abrasive wear protection extends life of engine components
- Exceptional TBN retention resists harmful effects of corrosive exhaust gases and extends oil life
- Low ash content reduces particulate build-up in Diesel Particulate Filter (DPF) and enhances its life

#### Applications

- Latest high performance low emission engines including those equipped with DPF and Exhaust Gas Recirculation (EGR) and meeting US 2007 on-highway exhaust emission standards
- On-highway vehicles and off-highway equipments operating in severe low speed/heavy load conditions using either low (500 ppm) or ultra low (15 ppm) sulphur fuels
- High performance gasoline engines and mixed fleet operations requiring oils meeting API CI-4 PLUS, CI-4, CH-4, CG-4 CF-4, SN (5W-40 & 10W-40), SM, SL and SJ performance levels

### **Specifications, Approvals & Typical Properties**

| Meets the following Specifications   |             | 5W-40          | 10W-30 | 10W-40 | 15W-40   |
|--|-------------|----------------|--------|--------|----------|
| ACEA E9  |             | Х              |        |        | Х        |
| MTU Oil Category 2.1, MAN M3575-1, MB 228.31, Volvo VDS-4, RVI<br>RLD-3, Mack EO-O PP, DDC DFS93K218 |             | х              |        | X      |          |
| Cummins CES 20081  |             | Х              | X      | Х      | Х        |
| CAT ECF 3, ECF 2 and ECF1a   |             |                | X      | Х      | Х        |
| Deutz III-10 LA  |             |                | Х      | Х      |          |
| Has the following Approvals  |             |                |        |        |          |
| API CJ-4/SN  |             | Х              |        | Х      |          |
| API CJ-4, Volvo VDS-4, Renault VI RLD-3, Mack EO-O Premium Plus                                      |             |                | X      |        | Х        |
| MB-Approval 228.31, MAN M 3575, MTU Oil Category 2.1   |             |                | X      |        | Х        |
| Typical Properties   |             |                |        |        |          |
| Test Parameters  | ASTM Method | Typical Values |        |        |          |
| Viscosity @ 100 °C, cSt  | D 445       | 15.1           | 11.8   | 14.3   | 14.9     |
| Viscosity Index  | D 2270      | 169            | 142    | 155    | 136      |
| Flash Point, °C  | D 92        | 230            | 230    | 232    | 230      |
| Pour Point, °C   | D 97        | -36            | -33    | -39    | -30      |
| TBN, mg KOH/g  | D 2896      | 10.4           | 9.4    | 8.1    | 7.6      |
| Density @ 15°C, Kg/l   | D 1298      | 0.857          | 0.871  | 0.855  | 0.861    |
| Sulphated Ash, %wt   | D 874       | 0.94           | 0.99   | 0.98   | 0.96     |
| Phosphorus, %wt  | D 4047/ICP  | 0.115          | 0.114  | 0.113  | 0.113    |
| Sulphur, %wt   | D 129/ICP   | 0.30           | 0.39   | 0.360  | 0.360    |
|  |             |                |        | Octol  | ber 2019 |

Properties mentioned above are typical only and minor variations, which do not affect the product performances, are to be expected in normal manufacturing. The above information is based on past history of the grade only and must not be construed as a guarantee of performance. Follow equipment manufacturer's recommendations for performance level and viscosity grade. The Material Safety Data Sheet for this product is available from your nearest Gulf Distributor.

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