

## EMIRATES 1 DX 09 ACE

### (Heavy Duty Diesel Engine Oils)

#### Description

**Emirates 1 DX 09 ACE** is a multi-grade Heavy Duty Diesel Engine Oils formulated to provide excellent performance in heavy duty fleets, marine and industrial applications. The advanced product technology offers a medium extended drain formulation that helps maximize engine durability.

#### Applications

**Emirates 1 DX 09 ACE** is recommended for use in all naturally aspirated and turbo-charged diesel engines fitted in trucks, tractors, buses, goods carriers (LCVs), 3-wheelers and gensets, on-highway light and heavy-duty trucking, off-highway industries including: construction, mining, quarrying, and agriculture & mixed fleet applications.

#### Performance Features and Benefits

- High thermal and oxidation stability
- Deposit control and acid neutralization
- Start-up wear protection
- Cleaner engines and longer component life
- Improved soot handling
- TBN reserves
- Advanced detergency/dispersancy
- Excellent low temperature properties
- Exceptional high temperature protection for hot running engines under heavy load
- Component compatibility
- Longer gasket and seal life
- Stay-in-grade shear stability
- Improved viscosity control and used oil pumpability

#### Recommendations/Specifications

**Quality Level:** CJ-4, CI-4 PLUS, CI-4, CH-4, CG-4, CF-4, CI-4/SM, CI-4/SL, CH-4/SJ, CF; ACEA - A3/B3, E2, E3, E4, E5, E6, E7, E9, JASO-DH-1.

**Meets or exceeds:** Caterpillar® – ECF-3, ECF-2 • Cummins® – CES 20081, 20078, 20077 • Daimler – MB 228.31, 228.3 & 229.1 • Detroit Diesel® – Power Guard 93K218 and previous • Deutz – DQC 111-05 • Global – DHD-1 • JASO – DH-2 • Mack® – EO-O Premium Plus and previous • MAN – M 3275, 3575 • MTU – Type 2.1 • Renault® – VI RLD-3 • Volvo® – VDS-4, VDS-3 • Allison® – C-4.

Meets quality requirements of most gasoline engine manufacturers in the USA, UK, Canada, Europe, and Japan.

#### Typical Technical properties

|                                                             |            |            |            |
|-------------------------------------------------------------|------------|------------|------------|
| Viscosity Grade, SAE J300                                   | 10W-30     | 15W-40     | 20W-50     |
| Density at 15°C, g/ml, ASTM D4052                           | 0.865      | 0.875      | 0.883      |
| Kinematic Viscosity at 40°C, mm <sup>2</sup> /s, ASTM D445  | 77.9       | 109.5      | 162.95     |
| Kinematic Viscosity at 100°C, mm <sup>2</sup> /s, ASTM D445 | 12.0       | 15.2       | 19.5       |
| Viscosity Index, ASTM D2270                                 | 150        | 146        | 138        |
| Flash Point(COC), °C, ASTM D92                              | 220        | 224        | 230        |
| Pour Point, °C, ASTM D97                                    | -36        | -30        | -24        |
| Cold Cranking Viscosity(CCS), mPa s, ASTM D5293             | 6800@-25°C | 6500@-20°C | 8300@-15°C |
| Total Base Number, mg KOH/g, ASTM D2896 (Max)               | 10.5       | 10.5       | 10.5       |
| Sulfated Ash, wt %,ASTM D874                                | 1.10       | 1.20       | 1.30       |

\*C & B: Clear & Bright

**Note:** The information on this Product Data Sheet is believed to be accurate and is typical of current production. Specifications are subject to change without notice. For additional queries, please contact Emirates 1 Technical Service Department.

**Health and Safety:** Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS). Safety Data Sheets available on request.

**Available in:** **Cartons:** 12x0.7L, 12x 1 L, 24x1 L, 4x5L 6 x 4 L, 6 x 5 L, **Pails:** 20 L & 25 L, **Drums:** 200 L, 208 L