



GLORIA 15W-50 CH-4/SJ

Diesel Engine Oil HDDEO

Black Bulls **GLORIA** Synthetic Heavy-Duty Diesel Engine oil (HDDEO) contains semi synthetic base stock formulated with the multiple advance additives technology. GLORIA Semi synthetic diesel engine oil provides superior lubrication for both on- and off-road diesel engines with EGR or DPF and high speed four stroke diesel engine for commercial, personal or off-road application or as recommended by OEM.

ACEA-E-12(2012) MB-228.57/229.1, MAN M-3477- VOLVO VDS-3, CAT-ECF-19

Typical properties:

| PROPERTY | UNIT | TEST METHOD | TYPICAL VALUES |
|----------------------------|----------|-------------|----------------|
| SAE VISCOSITY GRADE | | | 15W-50 |
| APPEARANCE | NA | VISUAL | B&C |
| COLOR | NA | ASTM D-1500 | 3.0 |
| DENSITY @29.5°C | g/mL | ASTM D-4052 | 0.8800 |
| KINEMATIC VISCOSITY @100°C | cSt | ASTM D-445 | 18.5 |
| KINEMATIC VISCOSITY @40°C | cSt | ASTM D-445 | Report |
| VISCOSITY INDEX | NA | ASTM D-2270 | 136 |
| CORRECTED FLASH POINT | °C | ASTM D-92 | 236 |
| HOMOGENEITY/MISCIBILITY | NA | ASTM D-6922 | Pass |
| ACCEPTABLE ODOR | NA | VISUAL | Agreeable |
| POUR POINT | °C | ASTM D-97 | -30 |
| TOTAL BASE NO. (TBN) | mg KOH/g | ASTM D-2896 | 10.5 |

Advantages:

- Exhibits easier cold weather starting
- Resists breakdown at high temperatures.
- Resisting deposits caused by soot and acids
- Withstands the stress of heat, wear and corrosion
- Longer drain intervals and smooth running of engines.
- Good compatibility with rubber to Protect rubber seals.
- Increases fuel economy due to ultra-low vaporization loss.
- Specially designed for Engine with EGR and turbochargers fitted.
- Highly efficient in dispersancy and detergency keeps engine clean.
- Reduces Kinetic energy loss out of friction wear by effectively dispersing ash and deposits.

Performance Specification:

- This product meets or exceeds the following specifications
- API CH-4 and lower API, such as CF-4 and CD-4

Applications:

- Use for all diesel engines where API CH-4 or lower and above service grade recommended by the manufacturer. Serves best for diesel engines with EGR system and turbochargers.

