



RUBIA WORKS 1000 15W-40



Very high performance lubricant suitable for engines of earthmoving, construction or mining machinery from worldwide origins.

SPECIFICATIONS AND APPROVALS

International specifications ACEA E7/E5 API CI-4/CH-4/CF/SL JASO DH-1 (Approved D033TOL601)

Manufacturers' approvals

- ✓ CUMMINS CES 20078/20077/20076
- ✓ DEUTZ DQC III-10
- ✓ MTU Category 2
- ✓ VOLVO VDS-3
- ✓ DETROIT DIESEL DFS 93K215
- ✓ MACK EO-N
- ✓ MAN M 3275-1
- ✓ MB-Approval 228.3
- ✓ RENAULT RLD-2
- ✓ ISUZU Orop List 2015

Meets the requirements of

- ✓ CATERPILLAR ECF-2 / ECF-1a



Recommended for the following engines

KOMATSU, HITACHI, LIEBHERR, CASE NEW-HOLLAND, DEERE, JCB, KUBOTA, MITSUBISHI, PERKINS, DAF, SCANIA, IVECO...

Transmission : ALLISON Approved TES 439 (N°439-33872016)

APPLICATIONS

TOTAL RUBIA WORKS 1000 15W-40 is especially suitable for **engines** used in **earthmoving activities** (quarries, construction, mining...). Furthermore, thanks to its numerous approvals, it can be used also in on-road truck engines.

This lubricant withstands **very long working periods** under severe conditions and high load, with dust and heat.

TOTAL RUBIA WORKS 1000 15W-40 is recommended for engines meeting **EURO Stage IIIA or US EPA Tier 3** Standards and, for On-Road, **EURO 5** (reduced drain interval for IVECO) or **US EPA-07**, as well as previous standards.

TOTAL RUBIA WORKS 1000 15W-40 is particularly suitable for American, European and Japanese engines. Furthermore, it can be used in ALLISON Off-Road transmissions (5000 to 9000 series), for more rationalization.

PERFORMANCES AND CUSTOMER BENEFITS

TOTAL RUBIA WORKS 1000 15W-40 exhibits **excellent thermal stability** ensuring efficient lubrication of hot engine pieces during severe and long working periods.

Detergent, dispersant and anti-wear additives contained in TOTAL RUBIA WORKS 1000 15W-40 help to reach long oil drain interval (by resisting against dust, soot, water, gazole, acid coming from the combustion...).

TOTAL RUBIA WORKS 1000 15W-40 has a reinforced viscosity at 100°C, so that the product is able to provide high oil pressure and to resist to the fuel dilution caused by long idling periods or by the use of Biodiesel (up to B30). Its low Pour Point allows for engine starting with very low temperature. It is adapted to **all engines brands and types** of old or recent generation.

PHYSICAL AND CHEMICAL CHARACTERISTICS*

| TOTAL RUBIA WORKS 1000 15W-40 | | Method | Value |
|-------------------------------|--------------------|------------|-------|
| Kinematic Viscosity at 40°C | mm ² /s | ASTM D445 | 115 |
| Kinematic Viscosity at 100°C | mm ² /s | ASTM D445 | 15,2 |
| Viscosity Index | - | ASTM D2270 | 138 |
| Pour Point | °C | ASTM D97 | -36 |
| T.B.N | mg KOH/g | ASTM D2896 | 11 |

* The features mentioned above are average values obtained with some variability in production and do not constitute a specification.

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This lubricant does not cause adverse health effects when used in the intended application.
A safety datasheet is accessible on request from your local dealer or on the website www.quickfds.com