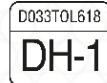# Rubia Works 1000 15W-40
Diesel Engine Oil

KEY DATA

DH-1
D033TOL618

PRODUCT MEETING JASO M 355
COMPANY GUARANTEEING THIS PERFORMANCE:
TotalEnergies Lubrifiants

High performance engine oil with high-technology base oils specially formulated for construction, mining or quarry machinery engines and recent heavy duty trucks.

INTERNATIONAL STANDARDS
- ACEA E7
- API CI-4/CH-4/CF/SL
- JASO DH-1

MANUFACTURER APPROVALS
- CUMMINS CES 20078/20077/20076
- DEUTZ DQC III-18
- MTU Category 2
- VOLVO VDS-3
- DETROIT DIESEL DDC 93K215
- MACK EO-N
- DTFR 15B110 (228.3)
- RENAULT VI RLD-2
- ALLISON TES 439 (N° 439-33872016)

MEETS THE REQUIREMENTS OF
- CATERPILLAR ECF-2 / ECF-1-a
- MAN M 3275

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

APPLICATIONS

Rubia Works 1000 15W-40 is particularly intended for the lubrication, in all seasons, of the engines of vehicles and machines of construction, quarries, mining, road transport, railway traction and power generating units. Moreover, thanks to its numerous approvals, it can also be used in the engines of road trucks.

This lubricant is more generally dedicated to engines having to operate during long periods of full load or in repeated acceleration and idling phases, in dusty and hot environments.

Rubia Works 1000 15W-40 is specially recommended for engines meeting the EURO Stage IIIA or US EPA Tier 3 or On-Road: Euro V or US EPA-07 emission standards.

This lubricant has been developed specifically for American, European and Japanese engines.
In addition, it can be applied in ALLISON Off-Road transmissions (5000 to 9000 series), offering even more rationalization.

PERFORMANCES & CUSTOMER BENEFITS

Rubia Works 1000 15W-40 is formulated using advanced technology base oil together with robust additives that provide enhanced lubrication performance.

- Rubia Works 1000 15W-40 exhibits excellent thermal stability ensuring efficient lubrication of the hot engine parts during severe and long working periods.
- Detergent, dispersant and anti-wear additives contained in Rubia Works 1000 15W-40 help to reach long oil drain interval (by resisting against dust, soot, water, fuel, acid coming from the combustion...).
- 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 using Biodiesel (up to B30).
- Its low Pour Point allows for engine starting with very low temperature. It is adapted to all engine brands and types of old or recent generation.

CHARACTERISTICS*

PROPERTIES	UNIT	TEST METHOD	RESULT
Grade	-	SAE J300	SAE 15W-40
Density	kg/m^3	ASTM D4052	879
Kinematic viscosity at 40 °C	mm²/s	ASTM D445	115
Kinematic viscosity at 100 °C	mm²/s	ASTM D445	15.2
Viscosity index	-	ASTM D2270	138
Dynamic viscosity at -20 °C	mPa.s	ASTM D5293	6600
Pour point	°C	ASTM D97	-42
Flash point	°C	ASTM D92	230
Total base number	mg KOH/g	ASTM D2896	11

* The characteristics given above are obtained with a standard tolerance threshold during production and may not be considered specifications.

RECOMMENDATIONS FOR USE

Before using the product, the vehicle's maintenance guide should be checked. Oil changes should be carried out in accordance with the manufacturer's recommendations.

The product should not be stored at temperatures over 60°C. It should be kept away from sunlight, intense cold and extreme temperature fluctuations. If possible, the packaging should not be exposed to the elements. Otherwise, the drums should be laid horizontally in order to avoid any contamination from water and to prevent the product's label from rubbing off.

HEALTH, SAFETY AND THE ENVIRONMENT

Based on the toxicological information available, this product should not cause any adverse health effects, provided it is used for its intended purpose and in accordance with the recommendations laid out in the Safety Data Sheet (SDS).

This can be obtained on request from your local reseller and is available for consultation at https://ms-sds.totalenergies.com. This product should not be used for any purposes other than the ones for which it is intended.

TotalEnergies