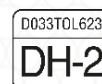


Rubia Works 5000 10W-40

Diesel Engine Oil

KEY DATA



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

High performance, "Low SAPS" engine oil especially developed for earthmoving, mining and quarries machinery engines.

INTERNATIONAL STANDARDS

- 🔥 ACEA E6 / E7 / E8 / E9 / E11
- 🔥 API CK-4/CJ-4/CI-4+/CI-4/CH-4
- 🔥 JASO DH-2

SUITABLE FOR

- 🔥 IVECO FPT TLS E9
- 🔥 IVECO FPT TLS CK-4

Recommended in engines of equipment :

- 🔥 WIRTGEN
- 🔥 VOGELE
- 🔥 KOMATSU etc...

MANUFACTURER APPROVALS

- 🔥 DEUTZ DQC IV-18 LA
- 🔥 RENAULT RLD-3
- 🔥 MTU Category 3.1
- 🔥 MAN M 3775
- 🔥 MACK EOS 4.5
- 🔥 DTFR 15C110 (228.51)
- 🔥 DTFR 15C120 (228.52)
- 🔥 DTFR 15C100 (228.31)
- 🔥 VOLVO VDS-4.5
- 🔥 CUMMINS CES 20086

MEETS THE REQUIREMENTS OF

- 🔥 LIEBHERR LH-01 ENG LA / LH-01
- 🔥 CATERPILLAR ECF-3/ECF-2/ECF-1a
- 🔥 MAN M3477 / M 3271-1
- 🔥 Detroit Diesel DFS 93K222

APPLICATIONS

Rubia Works 5000 10W-40 is especially suitable for engines used in earthmoving activities (quarrying, construction, mining...) This lubricant withstands very long working periods under severe conditions and high load, with dust and heat.

Rubia Works 5000 10W-40 is recommended for German engines meeting European standard EURO Stage V and American standard EPA Tier 4 final, requiring respectively ACEA E6 and API CK-4 / CJ-4 lubricants.

Furthermore, it is suitable for most road truck engines meeting Euro 6, recommended for SCANIA engines and those requiring a 10W-40 viscosity grade. It is also adapted to certain Gas engines.

Thanks to its "Low SAPS" (Low content of Sulphated Ash, Phosphorus and Sulphur) technology, Rubia Works 5000 10W-40 is designed for the latest Diesel engines equipped with post-treatment systems, such as Diesel particulate filters (DPF).

PERFORMANCES & CUSTOMER BENEFITS

Rubia Works 5000 10W-40 is formulated using synthetic technology base oil together with latest generation additives that provide enhanced piston cleanliness & lubrication performance allowing longer drain intervals.

- 💧 Rubia Works 5000 10W-40 exhibits excellent thermal stability ensuring efficient lubrication of hot engine pieces during severe and long working periods.
- 💧 The product belongs to the new "very long drain interval" engine oil generation (for example : up to 1000h in LIEBHERR engines).
- 💧 The advanced "Low SAPS" formulation Rubia Works 5000 10W-40 helps prevent the clogging of the Diesel particulate filter (DPF) and extends the post-treatment system durability.

CHARACTERISTICS *

PROPERTIES	UNIT	TEST METHOD	RESULT
Grade	-	SAE J300	SAE 10W-40
Density	kg/m ³	ASTM D4052	865
Kinematic viscosity at 40°C	mm ² /s	ASTM D445	97
Kinematic viscosity at 100°C	mm ² /s	ASTM D445	14.3
Viscosity index	-	ASTM D2270	160
Dynamic viscosity at -25°C	mPa.s	ASTM D5293	6680
Pour point	°C	ASTM D97	-45
Flash point	°C	ASTM D92	232
Total Base Number	mgKOH/g	ASTM D2896	10
Sulfated ash	% m/m	ASTM D874	<1.0

* 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 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 Lubricants / Last update of this datasheet: January 25 / Rubia Works 5000 10W-40

Some variations can be expected under normal production conditions, but these should not affect the product's expected performance irrespective of the site. The information contained in this document is subject to change without notice. Our products can be viewed on our website at www.lubricants.totalenergies.com.