



Rubia Optima 1100 15W-40

Diesel engine oil

KEY DATA



Mineral lubricant for diesel engines, suitable for use in on road applications, based on the latest CK-4 specification,

INTERNATIONAL STANDARDS

- ♦ ACEA E7, E9, E11
- API CK-4/CJ-4/CI-4 plus/CI-4/CH-4/SN

MEETS THE REQUIREMENTS OF

- DAF
- IVECO

MANUFACTURER APPROVALS

- MB-Approval 228,31
- Mack EO-S 4,5
- Volvo VDS-4,5
- Renault Trucks RLD-3
- Cummins CES 20086
- Detroit Diesel DFS 93K222
- Ford WSS-M2C171-F1

TECHNOLOGY Inno-Boost technology

Ready for the next chapter of engine technology.

With the Inno-Boost Technology, formulations incorporate the right combination of strong anti-oxidant molecules. These active molecules inhibit radical formation and keep the hydrocarbon chains intact. As a result, the engine oil viscosity remains stable and keeps its properties for longer time.



APPLICATIONS

Rubia Optima 1100 15W-40 is developed for the newest on-road diesel engines and suitable for existing diesel engines due to its backwards compatibility.

With its "low-SAPS" (low sulphated ash, phosphorus and sulphur) technology, Rubia Optima 1100 15W-40 protects diesel engines equipped with post-treatment systems such as diesel particulate filters (DPFs). Rubia Optima 1100 15W-40 enables coverage of a fleet of mixed brands, with only one product.

PERFORMANCES & CUSTOMER BENEFITS

- Rubia Optima 1100 15W-40 is formulated with excellent shear stability, thus maintaining its viscosity in highly loaded contacts and strong engine protection under severe conditions.
- TotalEnergies Rubia Optima 1100 15W-40 has improved oxidation stability that disrupts oxidation reactions, prevents formation of harmful sludge and protects hotter engines.
- Rubia Optima 1100 15W-40 is designed to control aeration, limiting the formation of air bubbles in the lubricants for a better engine efficiency.
- Exceptional detergent, dispersant and anti-wear additives keep the engine's most sensitive parts clean and enable effective control of soot, sludge and piston deposits.

CHARACTERISTICS*

TEST	UNIT	TEST METHOD	RESULT
Density at 15 °C	kg/m ³	ASTM D1298	877
Kinematic viscosity at 40°C	mm²/s	ASTM D445	118.2
Kinematic viscosity at 100°C	mm²/s	ASTM D445	15.47
Viscosity index	-	ASTM D2270	137
Pour point	°C	ASTM D97	-30
Flash Point	°C	ASTM D92	234
T.B.N	mg KOH/g	ASTM D2896	10
Sulphated Ash	% m/m	ASTM D874	0.99

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 <u>https://ms-sds.totalenergies.com</u>.

This product should not be used for any purposes other than the ones for which it is intended.



TotalEnergies Lubrifiants / Last update of this datasheet: October 22 / Rubia Optima 1100 15W-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.