

# Rubia Optima 1100 FE 10W-30

Diesel engine oil

## KEY DATA



Mineral low-SAPS lubricant for diesel engines, suitable for on-road heavy-duty applications, with Fuel Economy technology 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

### 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 FE 10W-30 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 FE 10W30 protects engines equipped with any kind of post-treatment systems, such as diesel particulate filters (DPFs). Rubia Optima 1100 FE 10W-30 enables coverage of a fleet of mixed brands, with only one product.

## PERFORMANCES & CUSTOMER BENEFITS

- 🔥 Rubia Optima 1100 FE 10W-30 is formulated with excellent shear stability, thus maintaining its viscosity in highly loaded contacts and strong engine protection under severe conditions.
- 🔥 Rubia Optima 1100 FE 10W-30 has improved oxidation stability that disrupts oxidation reactions, prevents formation of harmful sludge and protects hotter engines.
- 🔥 Rubia Optima 1100 FE 10W-30 is designed to control aeration, limiting the formation of air bubbles in the lubricants for a better engine efficiency.
- 🔥 High quality base stocks combined with high-performance additives make Rubia Optima 1100 FE 10W-30 an exceptional technical performances lubricant. Advanced additives keep the engine's most sensitive parts clean thanks to detergent, dispersant and anti-wear properties, added to effective control of soot, sludge and deposits.

## CHARACTERISTICS\*

| TEST                         | UNIT               | TEST METHOD | RESULT |
|------------------------------|--------------------|-------------|--------|
| Density at 15 °C             | kg/m <sup>3</sup>  | ASTM D1298  | 869.9  |
| Kinematic viscosity at 40°C  | mm <sup>2</sup> /s | ASTM D445   | 82.61  |
| Kinematic viscosity at 100°C | mm <sup>2</sup> /s | ASTM D445   | 12.19  |
| Viscosity index              | -                  | ASTM D2270  | 143    |
| Pour point                   | °C                 | ASTM D97    | -36    |
| Flash Point                  | °C                 | ASTM D92    | 221    |
| T.B.N                        | mg KOH/g           | ASTM D2896  | 10     |
| Sulphated Ash                | % m/m              | ASTM D874   | 0.99   |

\* 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.

