



# PRODUCT DATA SHEET

## **Havens Robusta HD SAE 10W40 API CK-4/ SN, CJ-4/ SN, ACEA E9**

### DESCRIPTION

**Havens Robusta HD SAE 10W40 API CK-4/ SN, CJ-4/ SN, ACEA E9** is an advanced fully synthetic heavy-duty diesel engine oil that helps extend engine life while providing long drain capability and potential fuel economy for modern diesel engines operating in severe applications. This product is formulated to deliver exceptional performance in modern and older hard-working engines. Havens Robusta HD is formulated to reduce pollutant emissions, such as HC, NOx, CO and particles and to protect and ensure longevity of post treatment anti-pollution systems, such as particulate filters (GPF, DPf) and three-way catalysts.

### APPLICATIONS

Havens Robusta HD CK-4 oils replace CJ-4 oils with the same viscosity grades and oil types (mineral/semi-synthetic/full-synthetic) and are backwards compatible down to CF-4 oils

**Recommended for both older model and 2017 greenhouse gas, GHG'17 compliant on-highway diesel engines. Ideal for extended drain in both European and US Engines**

This product meets or exceeds the requirements of the latest API and ACEA industry specifications for diesel engine oils, as well as the requirements of many major American, and European engine manufacturers.

### PERFORMANCE LEVELS

Meets and exceeds:

API CK-4/SN, CJ-4/CI-4; ACEA E6-12, E7-12, E9-12; MB 228.51, 228.31; MAN M3477, M3677; MTU Type 3.1; VOLVO VDS-4.5, VDS-4; Mack EO-O Premium Plus; Renault Trucks RLD-3; Cummins CES 20081, 20086; Caterpillar ECF-3; DEUTZ DQC III-IV LA; DDC 93K218, 93K222

### TYPICAL PROPERTIES

| PARAMETERS              | TEST METHOD | UNIT     | Havens Robusta HD SAE 10W40 |
|-------------------------|-------------|----------|-----------------------------|
| Viscosity Grade         |             |          | 10W40                       |
| Density @ 15°C          | ASTM D1298  | kg/l     | 0.855                       |
| Viscosity @ 100°C       | ASTM D445   | cSt      | 12                          |
| Viscosity @ 40°C        | ASTM D445   | cSt      | 68.5                        |
| Viscosity Index (min)   | ASTM D2270  | -        | 170                         |
| Cold Crank Simulator    | ASTM D5293  | cP       | <6,200 @ -35 °C             |
| Pour Point              | ASTM D97    | °C       | -45                         |
| Flash Point             | ASTM D92    | °C       | >230                        |
| Total Base Number (TBN) | ASTM D2896  | mg KOH/g | 10                          |



*The values shown above are typical values at the date of publication. Havens Lubricants reserves the right to change these typical values without prior notice.*

**HEALTH & SAFETY, ENVIRONMENT:**

Prolonged and repeated contact with oil may cause skin disorders. Avoid contact. Wash immediately with soap and water. Do not discharge used oil in to drains or the environment. Dispose to an authorized used oil collection point. For further Information on Safety Guidelines please refer to MSDS available on our website [www.havenslubricants.com](http://www.havenslubricants.com)

