

**PRODUCT INFORMATION GERMAN ADLER TX SAE 15W-40 CK-4****Description**

GERMAN ADLER TX SAE 15W-40 CK-4 is a high-performance engine oil based on the newest additive technology, matched with special base oils. It was developed for the latest generation of low-emission engines and provides excellent fuel economy. Due to the lower ash content as well as its outstanding oxidation and shear stability, it is used in modern truck engines.

**Application**

In compliance to EEC regulations the quality of GERMAN ADLER TX SAE 15W-40 CK-4 is equivalent according to the following standards / specifications:

- ACEA E7/E11
- API CK-4/CJ-4/SN
- API CI-4/CI-4 Plus
- Allison TES 439
- CAT ECF-3
- Cummins CES 20086
- Detroit Diesel DFS93K222
- Detroit Diesel DDC93K222
- Deutz DQC-III-10LA/18LA
- Ford WSS-M2C171-F1
- Jaso DH-2
- John Deere JDQ-78X
- Mack EOS-4.5
- MAN M 3575/M 3775/M 3275
- MB 228.31
- MTU Type 2.1
- Renault VI RLD-3
- Volvo VDS-4.5

**Advantages/Benefits**

- GERMAN ADLER TX SAE 15W-40 CK-4 is used as SHPD oil in engines with and without particulate filter and catalytic converter. It meets the special requirements of Low SAPS technology and is reliable in terms of cold start behavior and lubricity at high temperatures.
- GERMAN ADLER TX SAE 15W-40 CK-4 complies with the current API CK-4 and is excellently suited for use in EURO 2, EURO 3, EURO 4, EURO 5 und EURO 6 engines in combination with diesel fuel up to 500ppm sulfur content.
- miscible and compatible with conventional, also as synthetic branded engine oils. To make use of the full performance benefit of GERMAN ADLER TX SAE 15W-40 CK-4 a complete oil change is recommended

**Typical characteristics:**

|                    | Unit               | Value | Method       |
|--------------------|--------------------|-------|--------------|
| Density at 15°C    | kg/m <sup>3</sup>  | 857   | DIN 51 757   |
| Viscosity at 40°C  | mm <sup>2</sup> /s | 90,7  | DIN 51 562   |
| Viscosity at 100°C | mm <sup>2</sup> /s | 14,4  | DIN 51 562   |
| Viscosity index    | -                  | 165   | DIN ISO 2909 |
| CCS at -20°C       | mPa.s              | 6020  | DIN 51 377   |
| Pour point         | °C                 | -39   | DIN ISO 3016 |
| Flash point        | °C                 | 236   | DIN ISO 2592 |
| Sulphated ash      | mass. %            | 0,95  | DIN 51 575   |
| Sulphur            | mass. %            | 0,36  | ICP          |
| Phosphorus         | mass. %            | 0,11  | ICP          |
| TBN                | mg KOH/g           | 10,2  | DIN ISO 3771 |

The above data are true and correct to the best of our knowledge and belief and reflect the current state of knowledge and our development effort. All rights to changes reserved! The characteristic data indicated are subject to the repeatability and reproducibility of the given test methods.