Technical information

Cera Tec oil additive

With High-tech ceramic wear protection!

Cera Tec is a suspension based on microceramic solid lubricants and chemical active agents in selected base oils. This combination reduces friction and protects the engine and transmission against wear. This in turn reduces the likelihood of expensive repairs and increases the service life of the assemblies.

Cera Tec offers high mechanical and thermal stability, ensuring outstanding lubrication even under the toughest conditions. This increases the smooth running of the engine. It saves energy and reduces frictional losses.

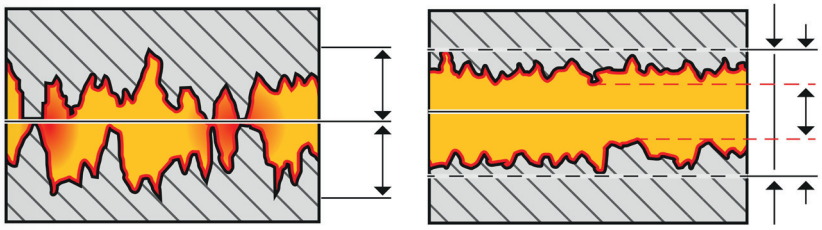
The mutual reactions between the microceramics and the metal surface protect the engine for up to 50,000 kilometers.

Properties of Cera Tec

Cera Tec is self-mixing and compatible with all standard motor oils. Also tested for vehicles with turbochargers, catalytic converters, or particulate filters. It is ideal for use in oil-lubricated transmissions, pumps, and compressors. In new vehicles, Cera Tec supports engine break-in and protects against excessive wear. With a particle size of only < 0.5 micrometers, it is absolutely compatible with all filters. Do not use in automatic transmissions and motorbikes with a wet clutch!

How Cera Tec works

The graphite-like structure of the ceramic particles enables them to fill in the roughness present in the metal, thereby preventing direct metal-on-metal contact. An active chemical (friction modifier) utilizes the existing friction energy to ensure smoothing, coating the friction and bearing points.



How Cera Tec is applied:

- Direct addition to the motor or gear oil (cold or warm)
- Ideally filled together with fresh oil when changing the oil
- 300 ml is sufficient for up to 5 l motor oil
- The optimal dosage is about 6 % of the total oil fill quantity
- Comply with oil change intervals as per the service documents of the vehicle

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Friction and wear are simulated

Proven efficiency

LIQUI MOLY products stand for reliability, effectiveness, and the highest quality – a performance promise that has been successfully put to the test in the truest sense of the word with the test procedure using the SRV tribometer.

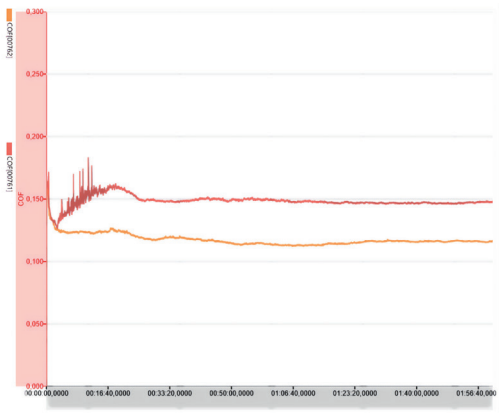
The SRV tribometer

SRV stands for Schwingungs-Reib-Verschleiß (oscillation, friction, wear). The effectiveness of a lubricant can be characterized using a linear oscillating motion of a test specimen on a special surface. Through different shapes of the test specimens and parameter selection, the various applications of lubricants, greases, and additives can be imitated on a laboratory scale.

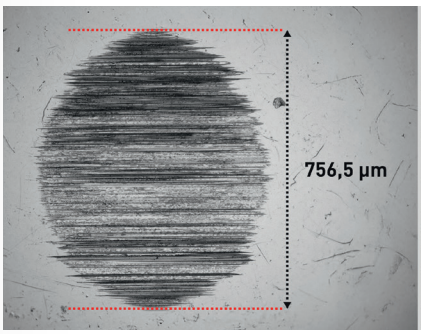
Measurement and results

Using targeted parameter selection, the wear of an engine can be simulated. A ball is used for the upper test specimen and a plate for the bottom specimen. The lubricating capacity can be examined through the motor oil or motor oil/Cera Tec mixture applied between these components. The friction value is determined during the measurement. Following the measurement, the wear marks on the test specimens are also measured.

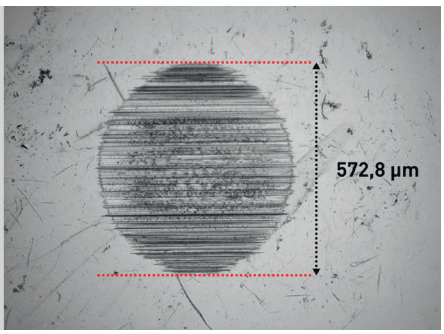
When using 6 % Cera Tec, it was possible to considerably improve both wear and friction compared to pure motor oil. This is proven by a heavily decreased friction value as well as minimized wear marks.



WITHOUT Cera Tec



WITH Cera Tec



In short: Cera Tec reduces the amount of friction and thereby the wear. This in turn benefits the engine, which is under less load. This can result in a lower susceptibility to repair and longer service life.