

Engine oil Q & A Part 2

More questions answered on the use of engine oil in modern engines.

What does light-brown sludge on the oil filler cap mean?

If a vehicle is mainly used for short journeys, this has the consequence that the condensation created by temperature differences mixes with the oil and does not evaporate. This oil/water emulsion is then deposited in the entire motor. This becomes visible at the oil filler cap in the form of light-brown sludge. In order to free the motor of this, LIQUI MOLY offers the oil sludge purge.

The oil is gray. Is this old oil?

The color of a motor oil provides no conclusions regarding quality or age. There are, therefore, chemical additives that superimpose on the actual color (amber) of the oil and therefore make it appear darker.

How long is oil good for?

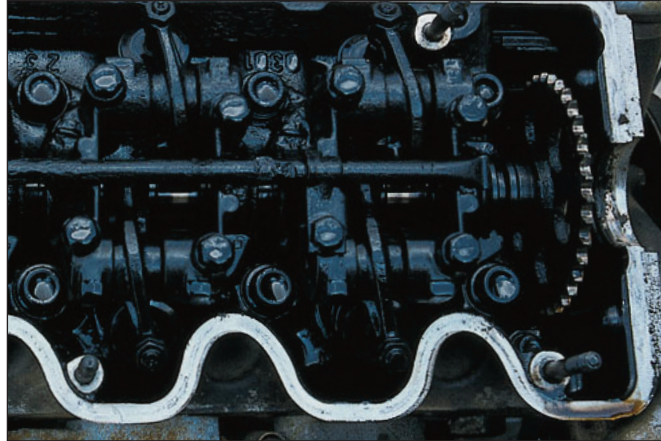
The minimum durability in small containers is five years – assuming it is stored in a dry place at temperatures between + 5 °C and + 30 °C and is not in direct sunlight.

The vehicle has been converted to Autogas, which oil should be used?

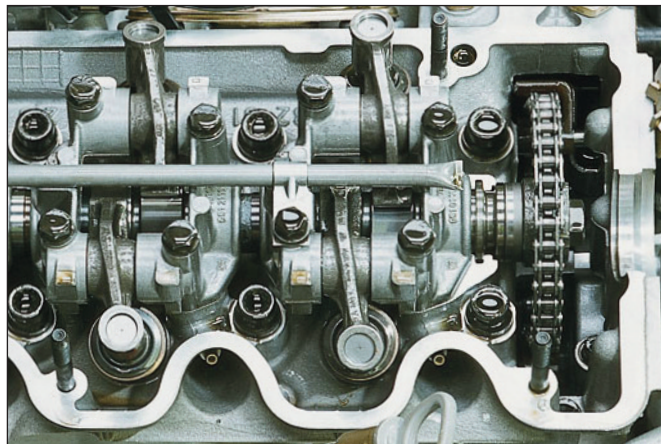
Fundamentally, the specifications of the gas system manufacturer and the motor manufacturer should be observed. If the vehicle manufacturer approves more general specifications (e.g. ACEA C2/C3 or C4), then low ash oils according to this specification are to be preferred during gas operation. Furthermore, Cera Tec as an oil additive for gas-operated motors is of a fundamental advantage. A dose of 7% to 8% in the motor oil is optimum.

Can I add HLP oil to the power steering of a vehicle?

No! HLP oils are hydraulic oils and are not intended for use in power steering. In the worst case this can lead to a failure of steering – particularly in low temperatures. Therefore please always observe the manufacturer approvals and requirements, as the steering is a safety-relevant component.



Using the incorrect spec oil, or going further between servicing can leave the inside of an engine tarnished and filled with sludge



Using the correct spec oil, and proper service intervals will result in a longer, and less troublesome life for your customer's engine

API, ACEA, JASO, ILSAC – what are these acronyms about?

There is a bunch of industry specifications for motor oil. The two most important ones in Europe are API and ACEA. API stands for American Petroleum Institute. They were the first to establish industry-wide standards for motor oil. Being a U.S. based institute, they focused on petrol engines. Diesel engines need different motor oil properties which were not well covered by API. This is why the ACEA, the European Car Manufacturer Association, decided to publish their own oil standards in the 1990s. Further acronyms, but not that

relevant to the European market, are ILSAC (International Lubricant Standardization and Approval Committee) and JASO (Japanese Automotive Standards Organization).

Why are there additional specifications from the car manufacturers?

The advanced engine design requires motor oil with very special properties. Some car manufacturers felt that the rather general industry specs like API and ACEA are not perfectly suited to their engines anymore. So they started to create their own specifications. These are based on the ACEA standards but go beyond them. To carry an official approval from a car manufacturer is the highest quality seal for a motor oil. Because this means that the car manufacturer himself has tested the oil and stands behind it.

This is very confusing. Why is the world of motor oil so complex?

Today the properties of motor oil are part of the design process of a new engine. Engine oil and engine have to match very closely and modern engine are not tolerant towards all types of engine oil. (Oil is like a fluid spare part that needs to fit precisely to the car.) The trick is not to be confused by all the science and the specification jungle but simply to understand that choosing the right oil is very important and to know how to

find the right oil. Of course, the car manual tells you exactly what type of oil is needed. Even more convenient is the online oil guide at www.liqui-moly.com. Just enter make, model and engine and you get a list of right motor oils (and other fluids).

Do I really need to stock so many different motor oils for my customers?

Basically yes. The number of different oil types keeps on growing which makes life more complicated for car owners, workshops and oil producers alike.

