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MODEL ALL

Only oils that are ready-formulated ("doped") and tested are approved for operating vehicles, engines and major assemblies. These ready-formulated lubricants are made from selected base oils (such as mineral oils, hydrocracked oils, PAO and ester) by mixing it with oil-soluble chemical additives.

In addition to the lubricating effect, these products have all the properties for optimal operation that are required of a good lubricant nowadays. Examples of these are wear and corrosion protection, detergent capability, cleansing effect, neutralization capability, dispersing capability (protection from sludge formation and deposits), aging resistance, corrosion protection, pressure absorption capability, foam inhibiting, cold flow capability and many more. The various additives in the ready-formulated lubricants are coordinated to each other and are properly proportioned.

Different companies supply products that have to be subsequently introduced or mixed into a ready-formulated lubricant and are intended to improve the characteristics of the lubricant. These additives are referred to as "Special additives" in the following in order to make a better distinction.

The following effects are assigned to special additives by the companies (or sales persons):

- Low friction, i.e. lower fuel consumption
- Reduced exhaust and soot emissions

- Longer oil change intervals

When a new engine, major assembly or vehicle is being developed, the spectrum of activity of the lubricants is investigated and analyzed in expensive series of tests in the laboratory, on the test stand and in the vehicle. The lubricant and the additives are tailored to the requirements and stresses that occur in close collaboration with the lubricant manufacturers. The ready-formulated lubricant is not approved by Daimler AG until successful testing has taken place. The approval is canceled whenever changes are made to the tested product.

If special additives are added in an uncontrolled manner there is a risk that the sensitive balance of base oil and additives is upset and the carefully balanced properties of the lubricants are worsened. Daimler AG has no direct way of influencing the type, quantity or handling of the special additives and checking each individual usage case.

Up to now Daimler AG has not approved any product that is allowed to be introduced or mixed into approved, ready-formulated lubricants for engines, transmissions or major assemblies in Mercedes-Benz vehicles as a special additive!

The vehicle owner is solely responsible if special additives are used in lubricants! If damage occurs the legal warranty and guarantee claims may be limited!