

Concentrated Gear Oil Additive

Bardahl Concentrated Gear Oil Additive is a concentrated gear oil addition for use in gearboxes and rear bridges. It reduces friction and wear and therefore lowers the temperature of the unit. This results in a more efficient operation of the gearbox and a significant reduction in maintenance and repair costs, not least a saving on fuel.

The problem

Gearboxes and rear bridges of passenger cars and trucks are often heavily loaded at very high speeds, which causes the ever-warming oil to form foam. This heat and foam reduce the lubrication capacity of the oil. This reduction in lubrication power automatically leads to increased friction and therefore wear. Wear and metal fatigue reduce the service life of the gears and increase energy consumption. In addition, the resulting gum and varnish layers will adversely affect the proper functioning of the gear transmission.

How it works

Bardahl Gear Oil Additive prevents this kind of problem. A special anti-foam addition prevents foaming and ensures that the cardan oil lubricates well even at high speeds. Bardahl's 'polar attraction formula' ensures that old precipitations are removed and a lubricating film forms, which can tolerate pressures and temperatures, many times higher than that of ordinary gearbox oils.

There is a group of gear reductions where the wear is very critical, because the contact between the gear profiles interconnected and the load are similar to that in a hypoid transmission. **Bardahl Concentrated Gear Oil** is ideally suited for these gearboxes and transmissions. Worm wheel reductions form a separate group under the gear transmissions. The lubrication of the surfaces between the teeth of the wheel and the worm is one of the biggest problems. There is a distinction between shipments with a parent and a child worm. It is mainly the shipments with an underlying worm that require a relatively thin oil to prevent the strong heat development due to the carn action of the oil.

In addition to the right viscosity, good oxidation stability also plays an important role here. For shipments with a parent worm, an oil with a higher viscosity can usually be chosen. **Bardahl Concentrated Gear Oil Additive** also ensures good oxidation stability and a good high pressure property.

In the case of hypoid transmissions, both in width and longitudinal direction between the teeth of pignon and crown wheel and sliding speed occur. As a result, the oil film can be completely broken locally and a strong heat development occurs.

The very heavy load in these types of transmissions causes metallic contact between the tooth flanks. The very high temperature and pressure ensures that the teeth are welded together locally and ripped off again.

Serious damage to the gears is the result. The high concentration of Bardahl ingredients in this product prevents a break through of the lubricating film. This is in contrast to normal gear oils, which use EP dopes for this purpose, which are based on phosphorus and sulphur compounds, with the main disadvantage of causing "inpitting" on the metal surface.

In summary, **Bardahl Concentrated Gear Oil Additive** provides the following benefits:

- Boundary lubrication properties at a high load.
- Good oxidation stability, so that the oil does not thicken or form Sludge
- Prevents corrosion
- Due to the high pressure properties of the Bardahl components, less friction and wear
- Due to the optimal lubrication, considerable energy or fuel savings.

Applications

Bardahl Concentrated Gear Oil Additive is used as an addition (5-20%) to the various types of gear oils, except vegetable oils. The percentage to be applied depends on the conditions of use.

N.B.

Bardahl also has a complete kardan and gearbox oil, in which the above product has already been processed.

Bardahl 'XTG' Gear Oils

These complete oils have a high viscosity index, which means that the oil is still liquid enough at a low temperature and not too thin at a high temperature. A low coagulation point ensures good lubrication downstairs. This oil is available in various viscosities, both mineral and synthetic.0°C

For more information, please refer to the separate product information.

Article number 01604
Content 125ml

Article number 01655
Content 5 liter