

Klüberalfa® DH 3 oils

High-temperature lubricating oils for sintered metal plain bearings and plastic components

Benefits for your application

- Long component life across a wide service temperature range
 - due to excellent thermal and chemical stability
 - Many component materials can be used
 - due to the good compatibility with plastics and elastomers¹
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Description

Klüberalfa® lubricants, based on perfluorinated polyether (PFPE), were developed to fulfil lifetime lubrication under demanding conditions and offer a number of characteristics that make them highly suitable for such tasks.

Klüberalfa DH 3 oils contain a PFPE oil mixture with excellent thermal stability and low evaporation rate. They are available with different viscosities to cover various temperature ranges.

Application

Sintered metal components

Klüberalfa DH 3 oils are used for the impregnation of sintered metal plain bearings subject to high temperatures where long-term lubrication is required. Due to their high thermal and chemical stability, additional lubrication with, for example, MIKROZELLA is normally not necessary.

Plastic components¹

Klüberalfa DH 3 oils are suitable for the lubrication of both plastic components and metal-plastic sliding contact surfaces. These clear, colourless and odourless oils do not form unwanted resins.

Klüberalfa DH 3 oils are generally regarded as neutral towards elastomers and plastics (possible exception: perfluorinated rubber), so no negative effect on the material is to be expected.

Nevertheless compatibility with the materials should be tested, especially prior to series application.

Application notes

Sintered metal components are impregnated by immersion in the Klüberalfa DH 3 oil. The oil bath can be heated up to a maximum of 80 °C, during which the immersion tank is subjected to a low vacuum of 0.1 to 0.001 bar, accelerating penetration. The sintered-metal component is completely filled with oil when no more air bubbles are expelled to the oil surface.

Minimum shelf life

The minimum shelf life is approximately 60 months if the product is stored in its unopened original container in a dry, frost-free place.

Pack sizes

0.5 l canister
10 l canister

Material Safety Data Sheets

Material safety data sheets can be downloaded or requested via our website www.klueber.com. You may also obtain them through your contact person at Klüber Lubrication.



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Product data	Klüberalfa® DH 3-100	Klüberalfa® DH 3-150	Klüberalfa® DH 3-230	Klüberalfa® DH 3-350
Article number	090067	090068	090140	090069
Chemical composition	PFPE			
Service temperature range,* [°C]	-25 to 180	-25 to 200	-25 to 230	-25 to 230
Density at 20 °C, [g/cm³], approx.	1.89	1.90	1.90	1.93
Refractive index, DIN 51423 pt. 02, 20 °C, approx.	1.3000	1.3005	1.3010	1.3020
Viscosity, DIN 51 562, at 40 °C, [mm²/s], approx. at 100 °C, [mm²/s], approx.	100 12	150 18	230 24	350 35
Viscosity index, DIN ISO 2909, approx.	114	130	130	145
Pour point DIN ISO 3016, [°C]	≤ -40	≤ -35	≤ -27	≤ -25

* Service temperatures are guide values which depend on the lubricant's composition, the intended use and the application method. Lubricants change their consistency, apparent dynamic viscosity or viscosity depending on the mechano-dynamical loads, time, pressure and temperature. These changes in product characteristics may affect the function of a component.

Lubrication is our world

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www.klueber.com

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