

Klüberalfa® MR 3

Universal sliding fluid for seals, guides and plastic friction points in motor vehicles



Description

Klüberalfa lubricants, based on perfluorinated polyether oils, (PFPE) have been developed for specific applications where optimum performance under lifetime lubrication conditions is required.

Klüberalfa MR 3 is a thermally stable fluid with low evaporation characteristics for lubrication of component parts subject to sliding friction conditions. Compatibility with constructional materials is excellent.

Klüberalfa MR 3 contains a non-flammable solvent enabling application of a thin homogeneous lubricant film to all contact surfaces. The product can be used across the wide temperature range normally required in automotive applications.

Klüberalfa MR 3 is available in a propellant free pump-spray dispenser for convenient economical application without release of flammable solvent vapours or gases.

Application

Klüberalfa MR 3 was specifically developed for friction points in motor vehicles where improved sliding and noise dampening behaviour are required.

Klüberalfa MR 3 is compatible with the majority of constructional materials used in car body interiors including rubber, leather, fabric and plastics.

Klüberalfa MR 3 is also compatible with most thermoplastics and duroplastics such as those found in dashboard, seat and sunroof guide rails, arm rests, seat adjustment mechanisms, door and sunroof seals.

General behaviour towards plastics and elastomers

Perfluorinated polyether oils are generally regarded as neutral towards elastomers and plastics (possible exception: perfluorinated rubber). Nevertheless compatibility with the materials should be tested, especially prior to series application.

Application notes

For optimum lubrication results, we recommend cleaning the friction points with white spirit 180/210 followed by Klüberalfa XZ 3-1. Prior to initial lubrication with Klüberalfa MR 3, apply clean, dry compressed air or hot air to remove any remaining white spirit residues.

For initial lubrication, the friction points must be clean and bright (i.e. free from oil, grease or perspiration) and free from particles.

Klüberalfa MR 3

- Noise dampening effect
- Optimises the sliding behaviour of parts
- Can be used with different material combinations
- Available in a reliable spray dispenser / applicator

Minimum shelf life

The minimum shelf life is approx. 24 months if the product is stored in its original unopened container in a dry, frost-free place.

Pack sizes

100 ml pump-spray dispenser
500 ml canister
10 litre canister

Current material safety data may be downloaded from our website www.klueber.com or requested from Klüber Lubrication.

Product data	Klüberalfa MR 3
Article number	090118
Composition	PFPE, solvent
Service temperature range*, [°C]	- 40 to 100
Colour	transparent
Density at 20 °C [g/cm ³], approx.	1.53
Base oil viscosity, DIN 51562 pt. 01, at 40 °C [mm ² /s], approx.	100
at 100 °C [mm ² /s], approx.	9
Pour point, DIN ISO 3016, [°C]	< -45

* 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 mechanical loads, time, pressure and temperature. These changes in product characteristics may affect the function of a component.

The data in this product information is based on our general experience and knowledge at the time of printing and is intended to give information of possible applications to a reader with technical experience. It constitutes neither an assurance of product properties nor does it release the user from the obligation of performing preliminary tests with the selected product. We recommend contacting our Technical Consulting Staff to discuss your specific application. If required and possible we will be pleased to provide a sample for testing.



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