

# Klübertemp GR OT 20

Long-term grease for low-temperature applications



## Benefits for your application

- **Good resistance to media**
- **Good low-temperature behaviour**
- **Neutral towards plastic materials**
- **Low start-up torque**

## Description

Klübertemp GR OT 20 is a white, odourless long-term grease based on a low-viscosity perfluorinated polyether (PFPE) oil and a polytetrafluoroethylene (PTFE) thickener. This raw material selection enables excellent sliding friction results even at low temperatures.

Klübertemp GR OT 20 shows a neutral behaviour towards most plastics and elastomers and can therefore be used for a variety of component materials.

## Application

Klübertemp GR OT 20 is preferably used for the lubrication of plastics and seals where it shows exceptionally low friction values. This leads, for example, to a lower frictional heating of elastomers subject to dynamic loads and hence longer component life.

General behaviour towards elastomers and plastics

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

Further application examples are

- Electric motor bearings with a low starting temperature
- Clean room equipment
- Automotive industry

## Application notes

For optimum lubrication results, we recommend cleaning the friction points with white spirit 180/210 followed by Klüberalfa XZ 3-1. Then blow the surfaces with clean, dry compressed air or hot air to remove solvent residues. For initial lubrication, the friction points must be clean and bright, i.e. free from oil, grease, perspiration and contamination. Klübertemp GR OT 20 is applied directly or by means of brush, spatula or lubricant dispenser.

The technical sales departments at Klüber Lubrication may be contacted at any time for advice to ensure optimum service life results.

## Material safety data sheets

Material safety data sheets can be requested via our website [www.klueber.com](http://www.klueber.com). You may also obtain them through your contact person at Klüber Lubrication.

Pack sizes	Klübertemp® GR OT 20
Tube 100 g	+
Can 1 kg	+
Bucket 10 kg	+



# Klübertemp GR OT 20

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Product data	Klübertemp® GR OT 20
Article number	090179
Chemical composition, type of oil	PFPE
Chemical composition, solid lubricant	PTFE
Lower service temperature	-50 °C / -58 °F
Upper service temperature	70 °C / 158 °F
Colour space	white
Texture	homogeneous
Density at 20 °C	approx. 1.9 g/cm <sup>3</sup>
NLGI grade, DIN 51818	2
Worked penetration, DIN ISO 2137, 25 °C, lower limit value	265 x 0.1 mm
Worked penetration, DIN ISO 2137, 25 °C, upper limit value	295 x 0.1 mm
Oil separation, based on ASTM D 6184 [FTMS 791 C 321] after 30h/70°C	<= 6 % by weight
Evaporation loss, ASTM D 2595 22h/66°C	<= 2 % by weight
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	60 months

## Klüber Lubrication – your global specialist

Innovative tribological solutions are our passion. Through personal contact and consultation, we help our customers to be successful worldwide, in all industries and markets. With our ambitious technical concepts and experienced, competent staff we have been fulfilling increasingly demanding requirements by manufacturing efficient high-performance lubricants for more than 80 years.

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The data in this document is based on our general experience and knowledge at the time of publication 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 field tests with the product selected for a specific application. All data are guide values which depend on the lubricant's composition, the intended use and the application method. The technical values of lubricants change depending on the mechanical, dynamical, chemical and thermal loads, time and pressure. These changes may affect the function of a component. We recommend contacting us to discuss your specific application. If possible we will be pleased to provide a sample for testing on request. Klüber products are continually improved. Therefore, Klüber Lubrication reserves the right to change all the technical data in this document at any time without notice.

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