Klüberplex AG 11-461, -462

White operating and priming lubricants

Your benefits at a glance

- Reduced maintenance needs
  - low contamination of machine environment due to use of white solid lubricants and low lubricant consumption
  - very good adhesion even at low temperatures
  - product streamlining possible as the product is suitable for gear rim / pinion drives and bearings
- Improved component performance
  - less wear due to selected solid lubricants and additives
  - very good corrosion protection also when exposed to salt water

Your requirements - our solution

Klüberplex AG 11-461 and 462 offer very good wear and corrosion protective properties contributing to an efficient operation of your highly loaded installations and components.

These adhesive greases have proven effective for many years, providing reliable protection of components also when exposed to salt water or during extended periods of standstill.

Application

Klüberplex AG 11-461 and 462 have been designed as priming lubricants for gear rim and pinion drives and can also be used as contrast lubricant for checking the drive's load pattern.

In the offshore sector, marine applications and wind power stations subject to salt water, open gears, low-speed rolling bearings, sliding and guide rails, steel cables of winches or cranes and similar components can be effectively lubricated and protected using Klüberplex AG 11-461 and 462.

Application notes

Priming lubrication

Klüberplex AG 11-461 and 462 are applied by brush or spatula. For optimum results, we recommend cleaning the surfaces to be lubricated prior to lubrication.

To determine the right quantity for your application, the diagram overleaf provides guide values.

Operational lubrication

Klüberplex AG 11-461 and 462 can be applied by manually operated grease guns or through appropriate central lubricating systems and are sprayable at temperatures down to 0 °C. When applied by spray, an exhaustion device is necessary in order to avoid inhalation of spray mist (see SDS point 2).

Provided sufficient relubrication is ensured, short-term thermal loads of up to 200°C are permissible.The lubricant quantities to be used depend on the operating conditions and must be determined for each application individually. Extended exposure to intense sunlight may slightly change the lubricant's surface colour without affecting its performance.

Material safety data sheets

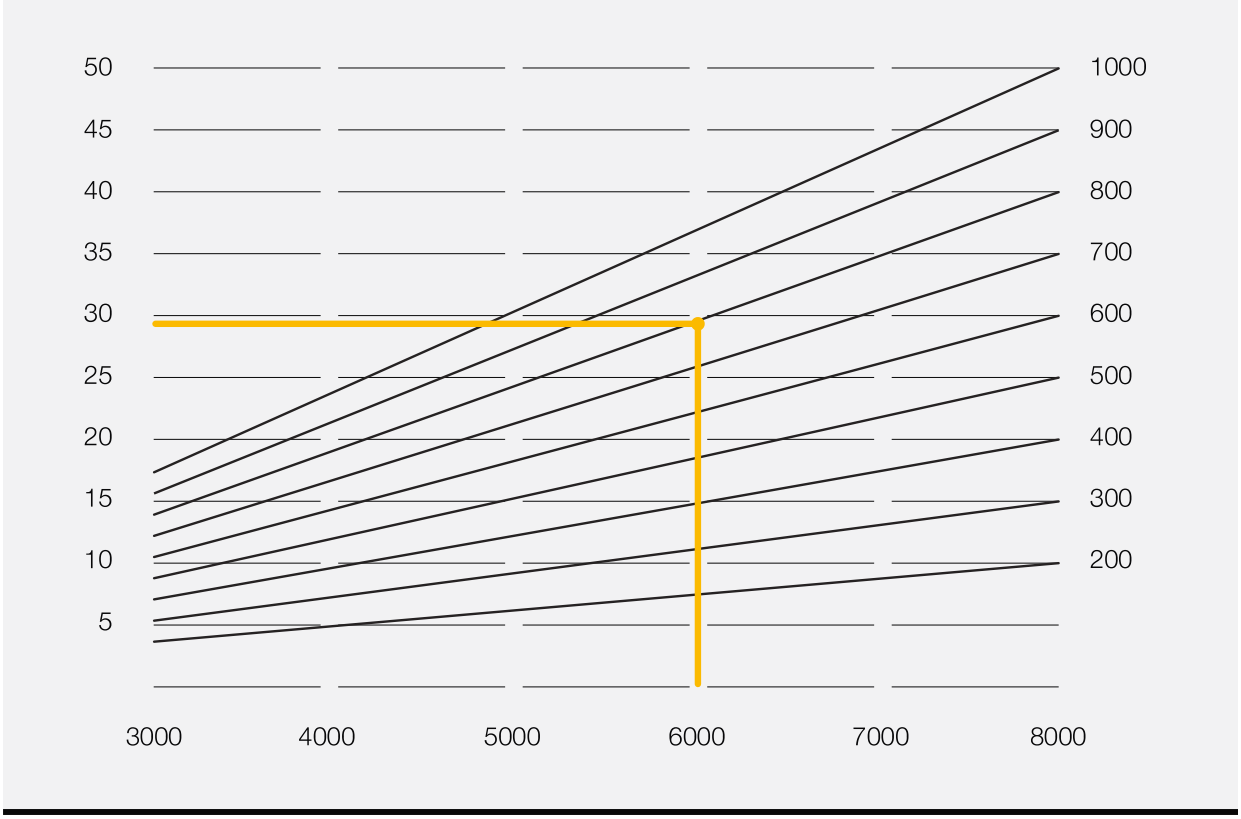
Material safety data sheets can be requested via our website www.klueber.com. You may also obtain them through your contact person at Klüber Lubrication.

a brand of FREUDENBERG

Klüberplex AG 11-461, -462

White operating and priming lubricants

Determining quantity required for priming lubrication



x-Achse Teilkreisdurchmesser [mm]
y-Achse links Bedarfsmenge [kg]
y-Achse rechts Zahnflankenbreite [mm]

Pack sizes	Klüberplex AG 11-461	Klüberplex AG 11-462	Klüberplex AG 11-462 Spray
Aerosol can 400 ml			+
Can 1 kg	+	+	
Bucket 5 kg	+	+	
Bucket 25 kg	+	+	
Bucket 50 kg	+	+	
Drum 200 kg	+	+	

Hint

Except for the article number and the minimum shelf life, the spray data below refer to the solvent-free spray agent.

a brand of FREUDENBERG

Klüberplex AG 11-461, -462

White operating and priming lubricants

Characteristics	Klüberplex AG 11-461	Klüberplex AG 11-462	Klüberplex AG 11-462 Spray
Article number	039213	039091	081302
NSF-H2 registration		145949	145950
Lower service temperature	-20 °C	-10 °C	-10 °C
Upper service temperature	150 °C	150 °C	150 °C
Colour space	white	white	white
NLGI grade, DIN 51818	1	2	2
Texture	homogeneous	homogeneous	homogeneous
Density at 20 °C	ca. 1,07 g/cm³	ca. 1,05 g/cm³	ca. 1,05 g/cm³
Drop point, DIN ISO 2176, IP 396	>= 180 °C	>= 180 °C	>= 180 °C
Flow pressure of lubricating greases, DIN 51805, test temperature: -10 °C			<= 1400 mbar
Solid lubricants, percentage	ca. 20 % by weight	ca. 20 % by weight	ca. 20 % by weight
Water resistance, DIN 51807 pt. 01, 3 h/90 °C, rating	0 - 90	0 - 90	0 - 90
Functional lubricant film	ca. -40 °C	ca. -40 °C	ca. -40 °C
ISO viscosity grade of the base oil, DIN ISO 3448	460	460	460
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	24 months	24 months	24 months
FZG scuffing test, based on DIN ISO 14635, A/2,76/room temperature, scuffing load stage	>= 12	>= 12	>= 12

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 90 years.

Klüber Lubrication München GmbH & Co. KG /
Geisenhausenerstraße 7 / 81379 München / Germany /
phone +49 89 7876-0 / fax +49 89 7876-333.

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.

Publisher and Copyright: Klüber Lubrication München GmbH & Co. KG. Reprints, total or in part, are permitted only prior consultation with Klüber Lubrication München GmbH & Co. KG and if source is indicated and voucher copy is forwarded.