

Description:

Klüberlub BVH 71-461 is a special lubricating grease based on mineral oil/synthetic hydrocarbon oil/polyurea. It has a wide service temperature range and is suitable for rolling bearings up to a service temperature of 160 °C.

Klüberlub BVH 71-461 ensures excellent wear protection, and its EP additives provide a high pressure absorption capacity.

It is very adhesive and resistant to water under static and dynamic loads.

Klüberlub BVH 71-461 is also particularly resistant to oxidation and ageing and reliably protects against corrosion. It has an especially high sealing effect in coke oven valves.

Application:

Klüberlub BVH 71-461 is suitable for rolling bearings subject to high temperatures, shock loads and/or aggressive liquids or active detergents. It has proven effective in electric motors, pumps and fans.

Klüberlub BVH 71-461 is also suitable for plain bearings operating under mixed friction conditions, where it reduces the temperature and friction in the friction points. Its high efficiency under extreme conditions makes Klüberlub BVH 71-461 an ideal grease for many applications in the base materials and construction industries, iron and steelworks, as well as coke ovens (gas valve grease).

Application notes:

Klüberlub BVH 71-461 is applied by brush, spatula, grease gun, or automatic metering system. It is also applicable through all conventional centralized lubrication systems.

Pipe friction values were determined with the Shell-DELIMON rheometer system.

Minimum shelf life:

The minimum shelf life is approx. 24 months if the product is stored in the original closed container in a dry place.

Package sizes:

25 kg bucket
180 kg drum

Klüberlub BVH 71-461

- Lubricating grease for extreme requirements
- Efficient at increased temperatures, vibrations and shock loads
- Resistant to ageing and oxidation
- Good protection against wear
- Good anticorrosion properties
- High pressure absorption capacity
- Resistant to aggressive media
- Good sealing effect
- Has proven effective in coke oven gas valves

Product data:

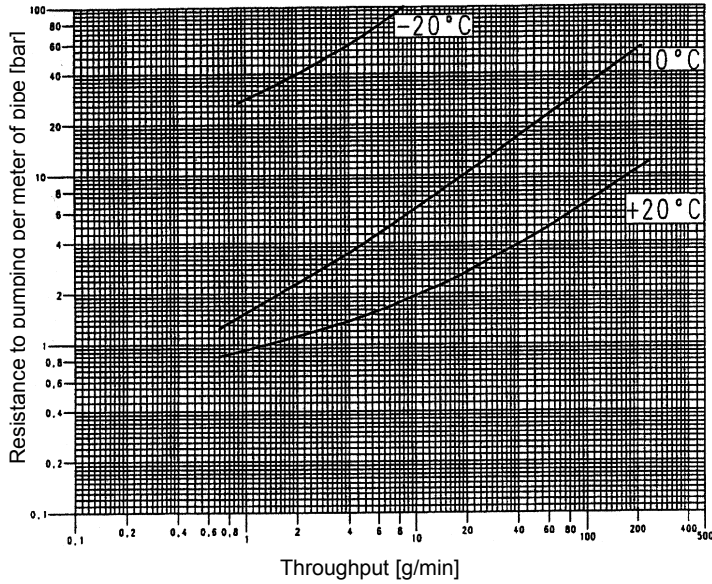
Colour	light brown
Service temperature range*, °C	– 20 to 160
Drop point, DIN ISO 2176, °C	> 240
Worked penetration, DIN ISO 2137 at 25 °C; 0.1 mm	340 to 370
Consistency, NLGI grade, DIN 51 818	0/1
Density, DIN 51 757 at 20 °C, g/cm ³ , approx.	0.90
Flow pressure at – 20 °C, DIN 51 805, mbar	< 1400
Water resistance, DIN 51 807 3 h/90 °C, rating	0/1 – 90
Corrosion protection, DIN 51 802 (Emcor test, 1 week, distilled water), corrosion rating	1/1

* 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.

Klüberlub® BVH 71-461

High-temperature lubricating grease for bearings and valves

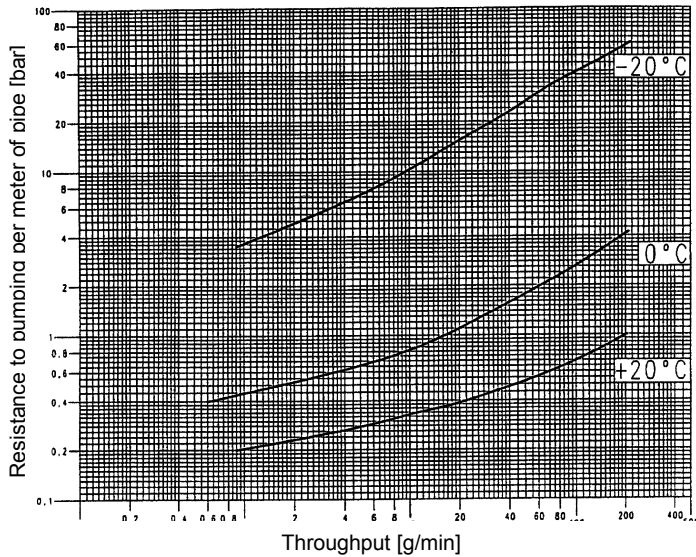
Diagram 1



Pipe friction values
measured with the Shell DELIMON
rheometer system

Test pipe DN 7 mm	Resistance to pumping [bar/m]			
	1 g/min	10 g/min	100 g/min	200 g/min
+ 20 °C	0.93	1.95	6.7	10.7
0 °C	1.53	6.3	33	55
- 20 °C	28.2	> 100		

Diagram 2



Pipe friction values
measured with the Shell DELIMON
rheometer system

Test pipe DN 16 mm	Resistance to pumping [bar/m]			
	1 g/min	10 g/min	100 g/min	200 g/min
+ 20 °C	0.22	0.33	0.7	0.98
0 °C	0.44	0.82	2.6	4.2
- 20 °C	3.63	10.2	39.5	57

Klüberlub® BVH 71-461

Safety Data Sheet

<p>1.1 Product name: Klüberlub BVH 71-461 Code-No.: 020 506 26.06.2001</p>	<p>9. Physical and chemical properties</p> <table border="0"> <tr><td>Form</td><td>paste</td></tr> <tr><td>Colour</td><td>light brown</td></tr> <tr><td>Odour</td><td>characteristic</td></tr> <tr><td>Drop point</td><td>> 240 °C, DIN ISO 2176</td></tr> <tr><td>Flash point</td><td>> 300 °C (base oil)</td></tr> <tr><td>Flammability</td><td>not applicable</td></tr> <tr><td>Ignition temperature</td><td>not applicable</td></tr> <tr><td>Autoflammability</td><td>not applicable</td></tr> <tr><td>Lower explosion limit</td><td>not applicable</td></tr> <tr><td>Upper explosion limit</td><td>not applicable</td></tr> <tr><td>Vapour pressure-first</td><td>not applicable</td></tr> <tr><td>Density</td><td>approx. 0.90 g/cm³, 20 °C</td></tr> <tr><td>Water solubility</td><td>insoluble</td></tr> <tr><td>pH value</td><td>not applicable</td></tr> <tr><td>Kinematic viscosity</td><td>not applicable</td></tr> <tr><td>Further information</td><td>none</td></tr> </table>	Form	paste	Colour	light brown	Odour	characteristic	Drop point	> 240 °C, DIN ISO 2176	Flash point	> 300 °C (base oil)	Flammability	not applicable	Ignition temperature	not applicable	Autoflammability	not applicable	Lower explosion limit	not applicable	Upper explosion limit	not applicable	Vapour pressure-first	not applicable	Density	approx. 0.90 g/cm ³ , 20 °C	Water solubility	insoluble	pH value	not applicable	Kinematic viscosity	not applicable	Further information	none
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<p>1.2 Klüber Lubrication München KG Geisenhausenerstraße 7 D-81379 München Tel. ++49 - 89 78 76 - 0 telephone exchange Fax: ++49 - 89 78 76 - 333</p> <p>Emergency telephone no.: ++49 - 89 7876 - 0</p>	<p>10. Stability and reactivity</p> <p>Conditions to avoid: None Materials to avoid: Strong oxidizing agents Hazardous decomposition products: None under normal use Additional information: None</p>																																
<p>2. Composition / information on ingredients Chemical characterization (preparation): Mineral oil, synthetic hydrocarbon oil, polyurea Additional information: No hazardous ingredients</p>	<p>11. Toxicological information The toxicological data has been taken from products of similar composition Acute toxicity: LD₅₀/oral/rat = > 2 g/kg (literature data) Chronic toxicity: None Human experience: Prolonged skin contact may cause skin irritation and/or dermatitis</p>																																
<p>3. Hazards identification No particular hazards known</p>	<p>12. Ecological information Information on elimination (persistence and degradability): Product is insoluble in water. May be separated out mechanically in purification plants Behaviour in environmental compartments: Ecological injuries are not known or expected under normal use Ecotoxic effects: Aquatic toxicity is unlikely due to low solubility Additional information: Should not be released into the environment</p>																																
<p>4. First aid measures After inhalation: Not applicable After contact with skin: Wash off with soap and plenty of water After contact with eyes: Rinse with plenty of water After ingestion: Do not induce vomiting. Obtain medical attention Advice to doctor: Treat symptomatically</p>	<p>13. Advice on Disposal Code of waste: 120 112. Wastes from shaping and surface treatment of metals and plastics; wastes from shaping (including forging, welding, pressing, drawing, turning, cutting and filing); spent waxes and fats Disposal: Can be incinerated when in compliance with local, state and federal regulations Dispose of contaminated packaging and recommended cleaning: Offer rinsed packaging material to local recycling facilities</p>																																
<p>5. Fire-fighting measures Suitable extinguishing media: Water spray, foam, dry powder, carbon dioxide (CO₂) Unsuitable extinguishing media: High volume water jet Special Hazards: In case of fire the following can be released: Carbon monoxide, hydrocarbons Special protective equipment for firefighters: Standard procedure for chemical fires Additional information: Water mist may be used to cool closed containers. In the event of fire and/or explosion do not breathe fumes</p>	<p>14. Transport information</p> <table border="0"> <tr><td>GGVS / GGVE:</td><td>not applicable</td></tr> <tr><td>ADN / ADN R:</td><td>not applicable</td></tr> <tr><td>IMDG-Code:</td><td>not applicable</td></tr> <tr><td>ICAO / IATA-DGR:</td><td>not applicable</td></tr> </table> <p>Further information: Not classified as dangerous in the meaning of transport regulations</p>	GGVS / GGVE:	not applicable	ADN / ADN R:	not applicable	IMDG-Code:	not applicable	ICAO / IATA-DGR:	not applicable																								
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<p>6. Accidental release measures Personal precautions: Not required Environmental precautions: Do not flush into surface water or sanitary sewer system Methods for cleaning up / taking up: Use mechanical handling equipment. Dispose of absorbed material in accordance with the regulations Additional information: None</p>	<p>15. Regulatory information Labelling according to EU-guidelines: The product does not require a hazard warning label in accordance with EC-directives/German regulations on dangerous substances National regulations</p>																																
<p>7. Handling and storage Advice on safe handling: No special handling advice required Advice on protection against fire and explosion: No special precautions required Requirements on storage rooms and vessels: No special storage conditions required Incompatible materials: Incompatible with oxidizing agents. Do not store together with food Further information on storage conditions: Store at room temperature in the original container</p>	<p>16. Other information Issue-department of Safety Data Sheet: Chemical Documentation, Tel.: ++49 - 89 7876 - 564</p>																																
<p>8. Exposure controls / personal protection Additional advice on system design: Not applicable Ingredients and specific control parameters: None Respiratory protection: No special protective equipment required Hand protection: No special protective equipment required Eye protection: No special protective equipment required Body protection: No special protective equipment required Other protection measures: No special protective equipment required General protection and hygiene measures: Avoid prolonged and/or repeated contact with skin. Remove soiled or soaked clothing immediately. Clean skin thoroughly after work; apply skin cream</p>																																	

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. Klüber products are continually improved. Therefore, Klüber Lubrication reserves the right to change all the technical data in this product information at any time without notice.



Klüber Lubrication München KG, a member of the Freudenberg group