



Klüberfluid M 4-5 BH, 4-30 BH

Synthetic barrier fluids

KLÜBER
LUBRICATION
your global specialist

Premature seal failures due to degradation of barrier fluids and formation of deposits on seal faces is a time-consuming issue for maintenance managers of rotating equipment. Therefore, Klüberfluid M 4 oils are a fully synthetic hydrocarbon oil with high viscosity index allowing the fluid to be exposed to a wide temperature range.

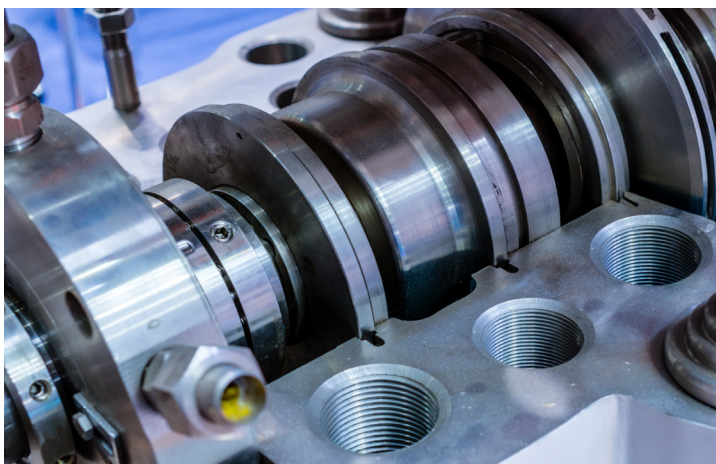
Excellent heat transfer properties efficiently remove the heat at the seal faces avoiding carbon blistering, which makes the oils the best choice for applications with frequent start-stop operation.

Klüberfluid M 4 oils are the right barrier fluid according to the process conditions for the proper functioning of the elastomer/seals in:

- Refineries
- Chemical and petrochemical plants
- Offshore oil and gas facilities
- Power plants
- Food and pharmaceutical plants

Your benefits at a glance

- Excellent thermal conductivity and high specific heat
- High temperature stability and low temperature fluidity
- Outstanding heat transfer properties, able to flow in very cold ambient temperature applications
- Very good thermal and oxidation stability
- Not listed as a VOC (Volatile Organic Compound) or VHAP (Volatile Hazardous Air Pollutants)
- No carbon blistering when a carbon ring is used
- Chemically inert and maximised MTBF (Mean Time Between Failure)
- Compatible with all common elastomers and metallurgy, promoting long life of sealing systems



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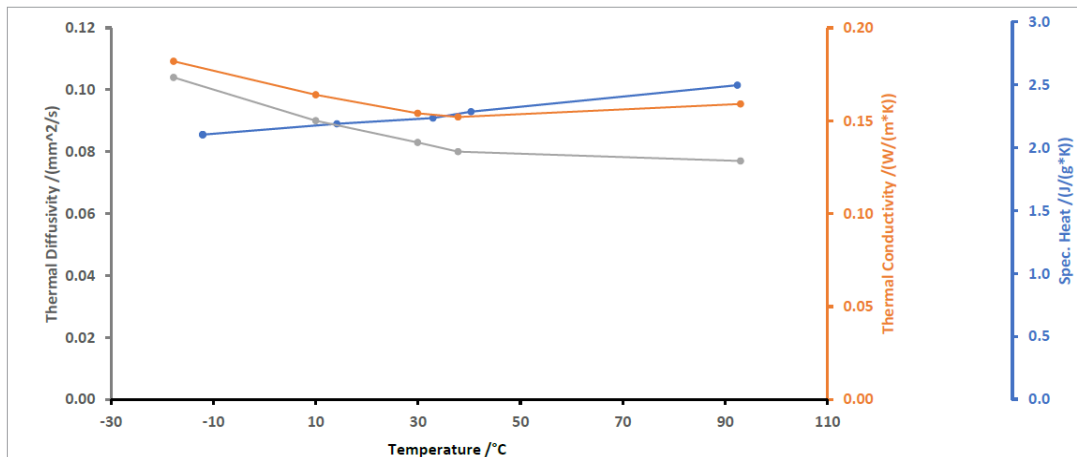
Klüberfluid M 4 oils: Data

Specific heat capacity / (J/(g*K))

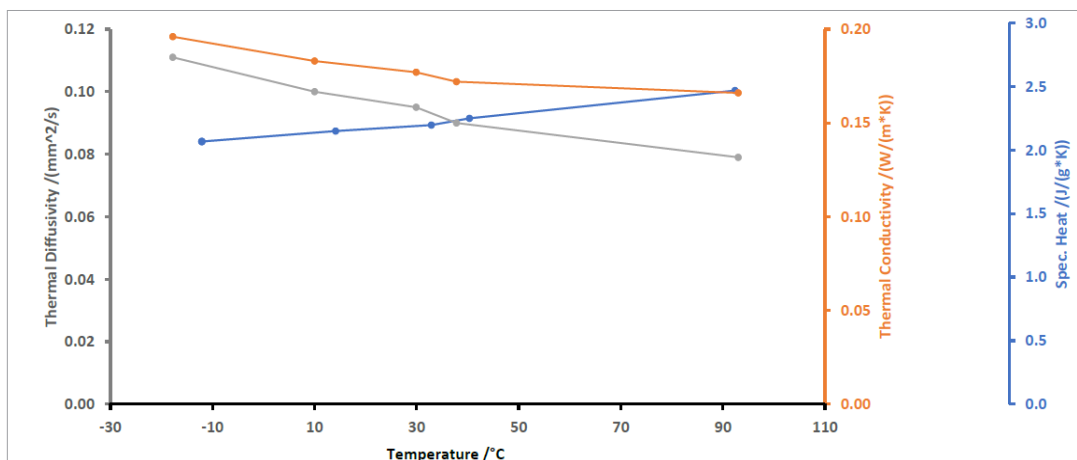
°C	°F	Klüberfluid M 4-5 BH	Klüberfluid M 4-30 BH
-17.8	0	2.103	2.067
10.0	50	2.189	2.150
29.9	86	2.235	2.197
37.8	100	2.286	2.250
93.0	199	2.496	2.468
148.0	298	-	2.665
204.4	400	-	2.853

Thermal conductivity / (W/(m*K))

°C	°F	Klüberfluid M 4-5 BH	Klüberfluid M 4-30 BH
-17.8	0	0.182	0.196
10.0	50	0.164	0.183
29.9	86	0.154	0.177
37.8	100	0.152	0.172
93.0	199	0.159	0.166



Thermophysical properties of sample Klüberfluid M 4-5 BH



Thermophysical properties of sample Klüberfluid M 4-30 BH