

Bathfluid data sheet

Thermal HL90

JULABO Thermal HL90 is a silicone-based bath fluid that can be used within a very broad working temperature range.

Working temperature: -90 °C ... +200 °C

Benefits:

- Low viscosity
- High stability
- Minimum odor
- Excellent heat conductivity
- Broad temperature range

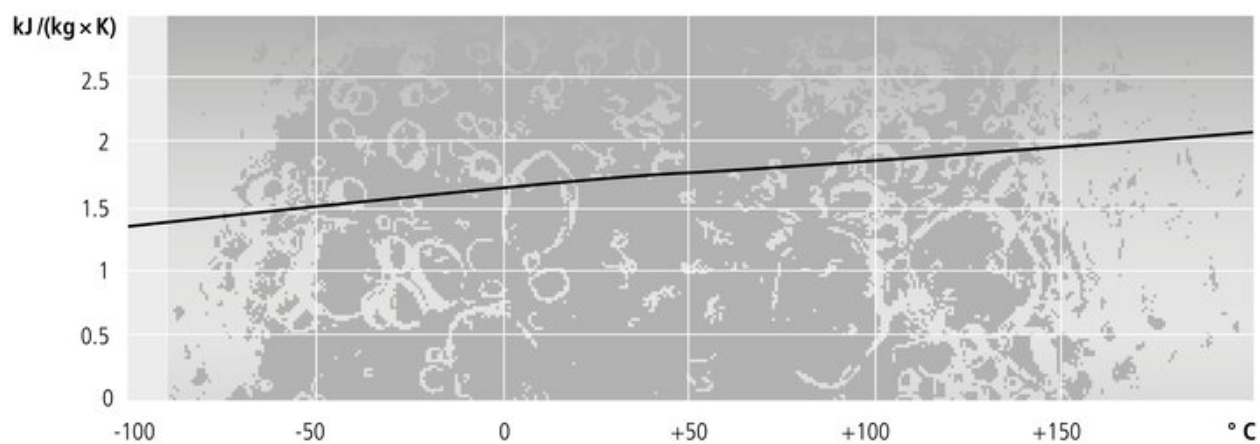
JULABO Thermal bath fluids are carefully selected and long-term tested media with ideal thermodynamic properties for a variety of applications. These bath fluids are ideally suited for temperature applications using JULABO instruments, and ensure safe, reliable operation as well as optimum heat transfer efficiency.

JULABO Thermal bath fluids are silicone based and chemically inert, which means they do not act upon metals like iron, copper, zinc, aluminum, chrome, or nickel. Compared to other fluids, JULABO Thermal bath fluids have an extraordinarily low electrical conductivity. When properly stored, these fluids will last for 12 months or longer since they are not susceptible to climatic influences. Proper use ensures a long service life because minimal cracking and oxidation degradation will occur. When using fluids at working temperatures close to the recommended limit values, we recommend checking or replacing the fluid every 2–3 months. Some JULABO silicone-based bath fluids contain a stabilizer to delay oxidation, which extends the service life of the oil.

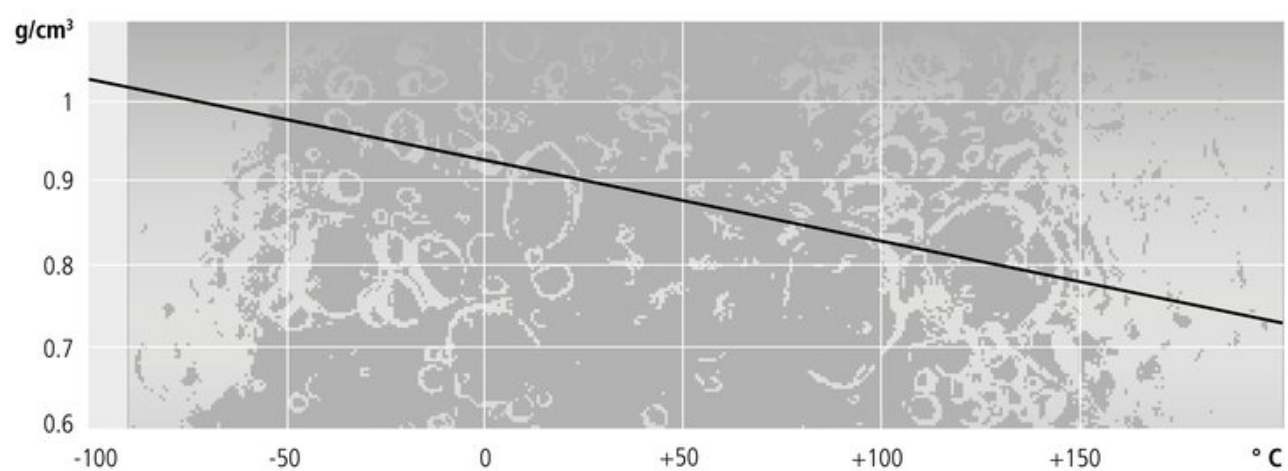
Do not use with silicone tubing! Silicone-based bath fluids can cause silicone tubing to dissolve. Therefore, JULABO metal tubing, JULABO Viton tubing, or JULABO PTFE tubing must be used for temperature control applications involving external systems.



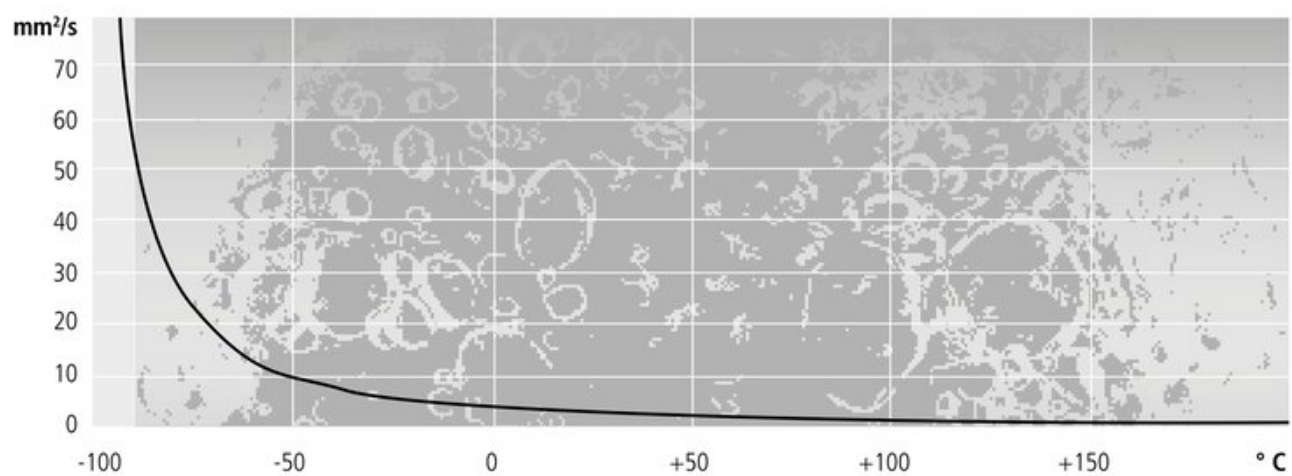
Specific heat capacity



Density



Viscosity



Technical data

Order number 5 liters	8940143
Order number 10 liters	8940142
	-90 ... +200
Flash point	>+80 °C
Fire point	+126 °C
Viscosity(kinematic at 20 °C)	2.16 mm ² /s
Density(at 20 °C)	0.91 g / cm ³
Pour point	-120 °C
Boiling point	+220 °C
Ignition temperature	+300 °C
Thermal expansion coefficient	0.00101 (g/(ml × K))
Heat conductivity	0.125 (W/(m × K))
Specific heat capacity	1.7 (kJ/(kg × K))@20°C
Specific volume resistivity	4*10 ¹⁴ (Ohm × cm)

Refer to www.julabo.com for more information regarding the entire JULABO product portfolio. Technical changes without prior notification. Images may deviate from the original. | Datasheet No.EN8940143/240422