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Registered in England and Wales No. 1631004
BS EN ISO 9001:2000 registered company

Product Information - FHTFLO Low Temp bath Fluid

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- Benefits and features
- Low viscosity
- Improves bath uniformity and stability
- Enhanced heat-up and cool down rates
- Lower cost than glycol and silicone oil type fluids
- Safe and non-toxic
- Convenient 18 Litre (5 US gallon) containers

The low temperature heat transfer fluid is engineered to offer nontoxic and low odour qualities at an affordable price.

This fluid will satisfy the expectations of the most demanding modern day customer by providing an environmentally sound, thermally effective heat transfer fluid with a flash point of greater than 61°C (141°F) or greater. The fluid offers a low viscosity rating and unequaled heat transfer characteristics through its entire operating temperature range. Recommended temperature range -40°C to 125°C.

When operator safety, environmental impact and price set the benchmark for your next open bath or closed loop heat transfer application, consider **FHTFLO**.

A fume hood is recommended for open baths being operated at temperatures above +50°C.

NOTE: This fluid should only be used with the following plastics: Acetal, Aramid Fiber, Chemraz (FFKM), Epoxy, Fluorocarbon (Film), Fluoroelastimer, Glass Fibre, Gylon style 3500,3504 & 3510, Kalrez, Kel-F (CTFE), PEEK, Polytetrafluor-ethylene, Teflon (All), Teflon Encapsulated Silicone, Teflon Encapsulated Viton, Teflon Impregnated Fibreglass, Viton, Resin Impregnated Carbon Graphite.

Metal Compatibility: Aluminium, Brass, Bronze, Carbon Steel, Cast Steel, Copper, Copper Nickel, Hasteloy, Inconel, Monel, Nickel, Stainless Steel, Tantalum, Titanium.

For all other material types contact Techne for specific recommendations.

Typical Properties – Low Temperature bath fluid Catalog # FHTFLO

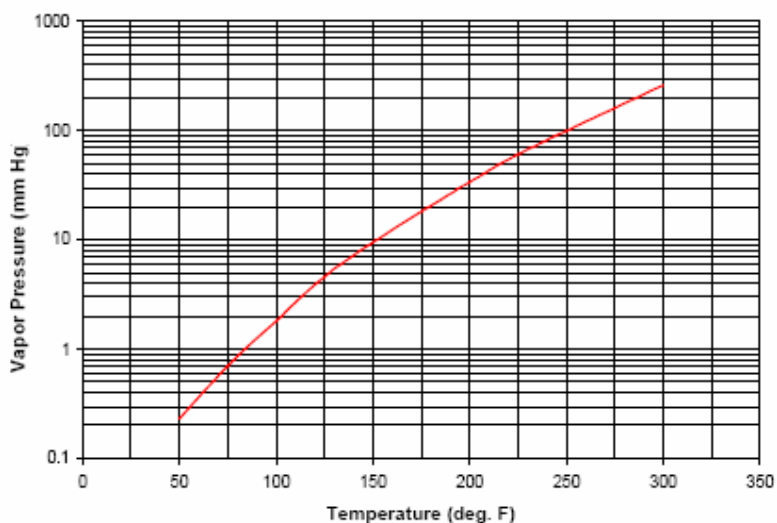
Appearance	Transparent, Clear.
Boiling Point	>191°C / >376°F
Composition	Aliphatic Hydrocarbon Blend
Fire point.....	72°C / 162°F
Flash point (Closed cup).....	>61°C / >141°F
Flash point (Open cup).....	68.8°C / 156°F
Auto ignition temperature	>337°C / >640°F
Critical Temperature (estimated).....	394°C / 741°F
Critical Pressure (estimated).....	27bar / 26.7 atm
Average Molecular Weight.....	150
Dielectric constant.....	2.1-2.2
Thermal Conductivity at 0°C/68°F.....	0.1126 W/m.K (0.0668 Btu/(hr)(ft ²) (°F/ft)
Recommended Temp. Range Open system.....	-52°C to 58°C (-60°F to 135°F)
Recommended Temp. Range Closed system	-73°C to 177°C (-100°F to 350°F)



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Notes:

1) Technically high temperature bath fluid or its vapor, like many other heat transfer fluids, may ignite if released into the environment and exposed to hot surfaces, sparks, open flames, or other source of ignition.



US Units

Temp. °F	Density lb/ft ³	Specific Heat Btu/lb °F	Thermal Conductivity Btu/(hr)(ft ²)(°F / ft)
-80	51.49	0.4266	0.0708
-40	50.44	0.4466	0.0688
0	49.38	0.4666	0.0668
40	48.33	0.4866	0.0648
80	47.28	0.5066	0.0628
120	46.23	0.5266	0.0608
160	45.18	0.5466	0.0588

SI Units

Temp. °C	Density kg/m ³	Specific Heat kJ/kg K	Thermal Conductivity W/m K
-75	834.5	1.7342	0.1276
-50	815.5	1.8292	0.1226
-25	796.5	1.9242	0.1176
0	777.6	2.0192	0.1126
25	758.6	2.1142	0.1076
50	739.6	2.2092	0.1026
75	720.6	2.3042	0.0976

Viscosity of FHTFLO

