

FRAGOLTHERM[®] Q-HTF

Heat Transfer Fluid
-18 °C to 325 °C

Application

FRAGOLTHERM[®] Q-HTF has a significantly higher thermal stability and service life than other heat transfer fluids based on mineral oil.

FRAGOLTHERM[®] Q-HTF can also be used in temperature ranges where aromatic heat transfer fluids are used. In case of thermal decomposition, no toxic products such as benzene or phenol are formed.

FRAGOLTHERM[®] Q-HTF exhibits very high thermal stability and can be used in the liquid phase in a temperature range between -18 °C and 325 °C. The film temperature at the heater must not exceed 345 °C.

Despite good thermal stability and a low tendency to oxidise, it is advisable to utilise a nitrogen blanket in the expansion tank during use in high temperature ranges, in order to prevent premature ageing.

Quality

FRAGOLTHERM[®] Q-HTF combines the specific performance of paraffinic hydrocarbons with the thermal stability of a synthetic product.

The base oil is subject to special hydro-cracking and purifying processes, in order to produce a high performance, transparent and almost odourless heat transfer fluid.

FRAGOLTHERM[®] Q-HTF is non-corrosive and is compatible with materials conventionally used in heat transfer technology.

Packaging

FRAGOLTHERM[®] Q-HTF is available as standard in steel drums and pails.

Notes

Please note that thermal or oxidative decomposition may cause an increase in low and high boiling substances when using heat transfer fluids even below the maximum specified bulk temperature.

When handling the product it is essential to observe the safety data sheet.

Please get in touch with us if you require further information or general technical advice.

Properties

FRAGOLTHERM [®] Q-HTF			Method
Density @ 20 °C	[kg/m ³]	858	
Viscosity @ 40 °C	[mm ² /s]	35.36	
Viscosity @ 100 °C	[mm ² /s]	6.16	
Pourpoint	[°C]	-18	ASTM D97
Flash point	[°C]	245	ASTM D92
Boiling point @ 1013 mbar	[°C]	380	
Max. film temperature	[°C]	345	
Max. bulk temperature	[°C]	325	
Water hazard class	[-]	1	
Dangerous goods according to IATA/IMDG/ADR	[-]	no	

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Temp. °C	Vapor Press. kPa (abs)	Density kg/m ³	Heat Capacity kJ/kgK	Thermal Cond. W/mK	Visc. (kin) mm ² /s	Visc. (dyn) mPas	Prandtl- Number
-10		873	1.81	0.140	915	799	10329
0		868	1.84	0.139	275	239	3164
10		863	1.88	0.138	131	113	1541
20		858	1.91	0.138	76.5	65.6	908
30		853	1.94	0.137	50.1	42.7	605
40		848	1.97	0.137	35.4	30.0	431
50		842	2.01	0.136	23.0	19.4	286
60		837	2.04	0.136	16.3	13.6	204
70		832	2.07	0.135	12.1	10.1	155
80		827	2.11	0.135	9.41	7.78	122
90		822	2.14	0.134	7.52	6.18	98.7
100		817	2.17	0.134	6.16	5.03	81.5
110		812	2.20	0.133	5.13	4.17	68.9
120		807	2.24	0.133	4.35	3.51	59.1
130		802	2.27	0.132	3.74	3.00	56.7
140		797	2.30	0.131	3.25	2.59	45.5
150		792	2.34	0.131	2.85	2.26	40.3
160		787	2.37	0.130	2.52	1.98	36.2
170		782	2.40	0.130	2.24	1.75	32.3
180		776	2.43	0.129	2.01	1.56	29.4
190		771	2.47	0.129	1.82	1.40	26.9
200	1	766	2.50	0.128	1.65	1.26	24.7
210	1	761	2.53	0.128	1.50	1.14	22.6
220	1	756	2.57	0.127	1.37	1.04	21.0
230	1	751	2.60	0.127	1.26	0.95	19.4
240	1	746	2.63	0.126	1.16	0.87	18.1
250	2	741	2.66	0.126	1.08	0.80	16.9
260	3	736	2.70	0.125	1.00	0.74	15.9
270	4	731	2.73	0.124	0.93	0.68	15.0
280	5	726	2.76	0.124	0.87	0.63	14.1
290	6	721	2.80	0.123	0.81	0.58	13.3
300	8	716	2.83	0.123	0.76	0.54	12.5
310	10	710	2.86	0.122	0.72	0.51	12.0
320	13	705	2.89	0.122	0.67	0.47	11.2

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All the above information is provided to the best of our knowledge. Any legal liability for the content of this information and the suitability of the product for certain applications is rejected. Technical data are approximate values and are subject to the usual production fluctuations.