

FRAGOLTHERM® Q-20

Heat Transfer Fluid
-19 °C to 300 °C

Application

FRAGOLTHERM® Q-20 is formulated for use in indirect heat transfer systems that require both a high temperature level and good start-up viscosity.

FRAGOLTHERM® Q-20 can be used in the liquid phase at temperatures between -19 °C and 300 °C. The film temperature at the heating element must not exceed 315 °C.

The low vapor pressure enables pressureless operation of the heat transfer system up to the maximum permissible flow temperature.

Despite its good thermal stability and low tendency to oxidise, we recommend a nitrogen blanket in the expansion tank when used in high temperature ranges to prevent premature degradation.

Quality

FRAGOLTHERM® Q-20 is a high-performance, transparent and almost odourless heat transfer fluid based on hydroisomerised hydrocarbons.

FRAGOLTHERM® Q-20 is non-corrosive and compatible with materials commonly used in heat transfer applications.

Packaging

FRAGOLTHERM® Q-20 is available as standard in steel drums and pails.

Notes

We would like to point out that the use of heat transfer fluids can lead to the formation of low and high boilers due to thermal or oxidative decomposition, even below the maximum specified flow 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-20			Method
Density @ 20 °C	[kg/m³]	834	-
Viscosity @ 40 °C	[mm²/s]	19.9	-
Viscosity @ 100 °C	[mm²/s]	4.10	-
Pourpoint	[°C]	-19	ISO 3016
Flashpoint	[°C]	>200	ISO 2719
Boiling point @ 1013 mbar	[°C]	>315	-
Film temperature max.	[°C]	315	-
Bulk temperature max.	[°C]	300	-
Water hazard class	[-]	1	-
Dangerous goods according to IATA/IMDG/ADR	[-]	no	-

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Temp. °C	Vapor Press. kPa (abs)	Density kg/m³	Heat Capacity kJ/kgK	Thermal Cond. W/mK	Visc. (kin) mm²/s	Visc. (dyn) mPas	Prandtl- Number
-10		853	2.02	0.134	245	209	4065
0		846	2.06	0.133	136	115	1775
10		840	2.09	0.132	76.3	64.1	1014
20		834	2.12	0.131	45.7	38.1	616
30		828	2.16	0.131	29.2	24.1	399
40		821	2.19	0.130	19.9	16.4	277
50		815	2.23	0.129	14.0	11.4	197
60		809	2.26	0.128	10.4	8.40	148
70		803	2.29	0.127	7.96	6.39	115
80		796	2.33	0.127	6.29	5.01	92.2
90		790	2.36	0.126	5.11	4.03	75.7
100		784	2.40	0.125	4.10	3.21	61.5
110		777	2.43	0.124	3.41	2.65	51.7
120		770	2.46	0.124	2.88	2.22	44.2
130		764	2.50	0.123	2.46	1.88	38.3
140		757	2.53	0.122	2.14	1.62	33.6
150		750	2.57	0.121	1.88	1.41	29.8
160		743	2.60	0.120	1.66	1.24	26.7
170		736	2.63	0.120	1.49	1.09	24.1
180	1	729	2.67	0.119	1.34	0.98	21.9
190	1	722	2.70	0.118	1.21	0.88	20.1
200	1	715	2.74	0.117	1.11	0.79	18.5
210	1	708	2.77	0.116	1.02	0.72	17.2
220	2	701	2.80	0.116	0.94	0.66	16.0
230	2	694	2.84	0.115	0.87	0.61	15.0
240	3	686	2.87	0.114	0.82	0.56	14.1
250	4	679	2.91	0.113	0.76	0.52	13.3
260	5	671	2.94	0.113	0.72	0.48	12.6
270	7	663	2.97	0.112	0.68	0.45	11.9
280	9	654	3.01	0.111	0.64	0.42	11.3
290	12	646	3.04	0.110	0.61	0.39	10.8
300	15	637	3.08	0.109	0.58	0.37	10.4
310	20	627	3.11	0.109	0.55	0.35	9.88
320	27	618	3.14	0.108	0.52	0.32	9.37

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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.