

FRAGOLTHERM® Q-7

Heat Transfer Fluid
-48 °C to 270 °C

Application

FRAGOLTHERM® Q-7 is a heat transfer fluid that has been specially developed for heating and cooling systems and exhibits very good viscosity behaviour in the low temperature segment. As such, **FRAGOLTHERM® Q-7** exhibits very good pumpability at low temperatures in comparison to other mineral oil products.

The product can be used in a liquid phase in a temperature range of between -48 °C and 270 °C. The film temperature at the heater must not exceed 285 °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-7 is a catalytically hydroisomerized mineral oil produced in a special process, with a high proportion of isoparaffinic hydrocarbons and an extremely low proportion of sulphur, nitrogen and aromatic compounds.

The base oil is subject to special hydro-cracking, solvent de-waxing and hydro-finishing processes, as well as subsequent distillation, in order to produce a high performance, transparent and almost odourless heat transfer fluid.

Sustainability

FRAGOLTHERM® Q-7 can optionally be purchased with the label "Engaged for Impact". Thereby, you support the financing of high-quality climate protection projects.

The climate protection projects compensate for CO₂ emissions caused by the entire life cycle of the heat transfer fluid.

Packaging

FRAGOLTHERM® Q-7 is available as standard in steel drums and pails.

Note

Please expressly note that it is possible in general terms, when using heat transfer fluids (also below the maximum specified bulk temperature), that low and high-boiling substances may arise due to thermal or oxidative decomposition.

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-7		Method
Density @ 20 °C	[kg/m³]	829.5
Viscosity @ 40 °C	[mm²/s]	7.27
Viscosity @ 100 °C	[mm²/s]	2.13
Pourpoint	[°C]	-48
Flashpoint	[°C]	170
Boiling point @ 1013 mbar	[°C]	305
Film temperature max.	[°C]	285
Bulk temperature max.	[°C]	270
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
-45		872	1.85	0.136	1573	1372	18633
-40		869	1.86	0.135	816	709	9786
-30		862	1.90	0.134	277	239	3388
-20		856	1.94	0.133	118	101	1474
-10		849	1.97	0.132	59.5	50.5	754
0		843	2.01	0.131	33.7	28.4	435
10		836	2.04	0.130	20.9	17.5	275
20		830	2.08	0.129	14.0	11.6	187
30		823	2.11	0.127	9.85	8.11	135
40		816	2.15	0.126	7.27	5.94	101
50		810	2.19	0.125	5.56	4.50	78.7
60		803	2.22	0.124	4.39	3.53	63.2
70		797	2.26	0.123	3.56	2.84	52.0
80		790	2.29	0.122	2.95	2.33	43.8
90		783	2.33	0.120	2.48	1.94	37.7
100		777	2.36	0.119	2.13	1.65	32.9
110		770	2.40	0.118	1.85	1.42	29.0
120		763	2.44	0.117	1.63	1.24	25.9
130		757	2.47	0.115	1.44	1.09	23.4
140		750	2.51	0.114	1.29	0.97	21.3
150	1	743	2.54	0.113	1.17	0.87	19.6
160	1	736	2.58	0.111	1.07	0.79	18.3
170	1	729	2.61	0.110	0.98	0.71	17.0
180	1	722	2.65	0.109	0.90	0.65	15.8
190	2	715	2.68	0.107	0.84	0.60	15.1
200	2	708	2.72	0.106	0.78	0.55	14.2
210	3	701	2.76	0.105	0.73	0.51	13.4
220	4	694	2.79	0.103	0.68	0.47	12.8
230	6	687	2.83	0.102	0.65	0.45	12.4
240	7	679	2.86	0.100	0.61	0.41	11.9
250	9	672	2.90	0.099	0.58	0.39	11.4
260	12	664	2.93	0.097	0.55	0.37	11.0
270	15	656	2.97	0.096	0.53	0.35	10.7
280	19	647	3.01	0.095	0.50	0.32	10.2

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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.