

FRAGOLTHERM® FG-35

Heat Transfer Fluid
-15 °C to 325 °C

Application

FRAGOLTHERM® FG-35 is specially designed for use in systems in which the contamination of foods by the heat transfer fluid cannot be excluded.

FRAGOLTHERM® FG-35 exhibits very high thermal stability and can be used in the liquid phase in a temperature range of between -15 °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® FG-35 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 heat transfer fluid is therefore particularly well suited for use in the food industry.

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.

FRAGOLTHERM® FG-35 has been classified by the NSF as "HT1", i.e. it is approved for applications in which incidental food contact may arise.

Packaging

FRAGOLTHERM® FG-35 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® FG-35			Method
Density @ 20 °C	[kg/m³]	861	
Viscosity @ 40 °C	[mm²/s]	35.40	
Viscosity @ 100 °C	[mm²/s]	5.80	
Pourpoint	[°C]	-15	ASTM D97
Flashpoint	[°C]	245	ASTM D92
Boiling point @ 1013 mbar	[°C]	>340	
Film temperature max.	[°C]	345	
Bulk temperature max.	[°C]	325	
Water hazard class	[-]	1	
Dangerous goods according to IATA/IMDG/ADR	[-]	no	

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FRAGOL THERM[®] FG-35

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		880	2.07	0.156	981	863	11449
0		874	2.11	0.154	373	326	4468
20		861	2.17	0.150	95.9	82.6	1195
40		849	2.23	0.146	35.4	30.0	459
60		836	2.30	0.143	16.7	13.9	224
80		824	2.36	0.139	9.27	7.64	130
100		811	2.43	0.137	5.80	4.70	83.5
120		799	2.49	0.134	3.95	3.15	58.6
140		786	2.56	0.132	2.87	2.25	43.7
160		773	2.62	0.131	2.18	1.69	33.7
180		761	2.69	0.129	1.72	1.31	27.3
200		748	2.75	0.128	1.40	1.05	22.5
220	1	735	2.82	0.127	1.17	0.86	19.1
240	1	722	2.88	0.127	1.00	0.72	16.3
260	1	709	2.94	0.127	0.87	0.61	14.2
280	2	695	3.01	0.127	0.76	0.53	12.5
300	6	682	3.07	0.126	0.68	0.46	11.1
320	16	669	3.14	0.126	0.61	0.41	10.0
340	36	655	3.20	0.126	0.56	0.36	8.98

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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.