

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 205 litre (178 kg) steel drums and in 20,5 litre (17,8 kg) 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 datasheet.

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	ASTM D97 ASTM D92
Viscosity @ 40°C	[mm²/s]	35,40	
Viscosity @ 100°C	[mm²/s]	5,80	
Pourpoint	[°C]	-15	
Flashpoint	[°C]	220	
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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Temp. °C	Vapour press. bar(abs)	Density kg/m³	Heat capacity kJ/kgK	Thermal cond. W/mK	Visc. (kin) mm²/s	Visc. (dyn) mPas	Prandtl number
-10	0,00	880	2,07	0,156	980,50	862,84	11449,2
0	0,00	874	2,11	0,154	373,20	326,10	4468,0
20	0,00	861	2,17	0,150	95,93	82,62	1195,3
40	0,00	849	2,23	0,146	35,40	30,05	458,9
60	0,00	836	2,30	0,143	16,66	13,93	224,1
80	0,00	824	2,36	0,139	9,27	7,64	129,7
100	0,00	811	2,43	0,137	5,80	4,70	83,5
120	0,00	799	2,49	0,134	3,95	3,15	58,6
140	0,00	786	2,56	0,132	2,87	2,25	43,7
160	0,00	773	2,62	0,131	2,18	1,69	33,7
180	0,00	761	2,69	0,129	1,72	1,31	27,3
200	0,00	748	2,75	0,128	1,40	1,05	22,5
220	0,00	735	2,82	0,127	1,17	0,86	19,1
240	0,01	722	2,88	0,127	1,00	0,72	16,3
260	0,03	709	2,94	0,127	0,87	0,61	14,2
280	0,05	695	3,01	0,127	0,76	0,53	12,5
300	0,08	682	3,07	0,128	0,68	0,46	11,1
320	0,13	669	3,14	0,129	0,61	0,41	10,0
340	0,21	655	3,20	0,130	0,56	0,36	9,0