

FRAGOLTHERM® 660

Heat Transfer Fluid
0 °C to 355 °C

Application

FRAGOLTHERM® 660 is used for pressureless, indirect heating in heat transfer systems. Typical fields of application are, for example, facilities that convert biomass into electricity (ORC-systems), synthetic fiber production, waste heat recovery, plastics processing, distillation and extrusion process.

FRAGOLTHERM® 660 can be used in the liquid phase at a temperature range of between 0 °C and 355 °C. The film temperature at the heater must not exceed 385 °C.

With use in high temperature ranges a nitrogen blanket is recommended in the expansion tank, in order to prevent premature ageing.

Quality

FRAGOLTHERM® 660 is a synthetic heat transfer fluid based on partially hydrogenated terphenyls.

Due to its chemical structure, **FRAGOLTHERM® 660** shows a high thermal stability and thus provides a long service life.

FRAGOLTHERM® 660 is non-corrosive and is compatible with materials conventionally used in heat transfer technology.

Packaging

FRAGOLTHERM® 660 is available in drums and in 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® 660			Method
Density @ 20 °C	[kg/m³]	1008	-
Viscosity @ 40 °C	[mm²/s]	30.39	-
Viscosity @ 100 °C	[mm²/s]	3.80	-
Pourpoint	[°C]	-24	ISO 3016
Flash point	[°C]	175	ISO 2719
Boiling point @ 1000 mbar	[°C]	360	-
Max. film temperature	[°C]	380	-
Max. bulk temperature	[°C]	355	-
Dangerous goods according to IATA/IMDG/ADR	[-]	yes	-

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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
0		1020	1.50	0.123	1299	1325	16104
10		1015	1.53	0.122	433	439	5509
20		1008	1.56	0.121	98.3	99.1	1280
30		1001	1.60	0.120	49.9	49.9	664
40		995	1.63	0.119	30.4	30.2	414
50		988	1.66	0.119	17.7	17.4	244
60		981	1.70	0.118	11.8	11.6	167
70		975	1.73	0.117	8.38	8.17	121
80		968	1.77	0.116	6.21	6.01	91.5
90		961	1.80	0.115	4.78	4.59	71.9
100		955	1.84	0.114	3.80	3.63	58.4
110		948	1.87	0.113	3.10	2.94	48.7
120		941	1.91	0.112	2.58	2.43	41.3
130		935	1.94	0.112	2.19	2.05	35.5
140		928	1.98	0.111	1.89	1.75	31.3
150		921	2.02	0.110	1.65	1.52	27.8
160	1	910	2.05	0.109	1.46	1.33	25.0
170	1	903	2.09	0.108	1.27	1.15	22.2
180	1	896	2.13	0.107	1.14	1.02	20.3
190	2	889	2.16	0.106	1.03	0.92	18.7
200	3	882	2.20	0.105	0.94	0.83	17.4
210	4	875	2.24	0.105	0.86	0.75	16.0
220	5	868	2.28	0.104	0.80	0.69	15.2
230	7	861	2.31	0.103	0.74	0.64	14.3
240	8	854	2.35	0.102	0.70	0.60	13.8
250	9	847	2.39	0.101	0.66	0.56	13.2
260	12	840	2.43	0.100	0.62	0.52	12.7
270	16	828	2.47	0.099	0.59	0.49	12.2
280	20	821	2.51	0.098	0.56	0.46	11.8
290	26	814	2.55	0.098	0.54	0.44	11.4
300	34	806	2.59	0.097	0.51	0.41	11.0
310	39	799	2.63	0.096	0.49	0.39	10.7
320	47	792	2.67	0.095	0.47	0.37	10.5
330	61	785	2.71	0.094	0.45	0.35	10.2
340	68	774	2.75	0.093	0.44	0.34	10.1
350	84	767	2.80	0.092	0.42	0.32	9.79
360	100	753	2.84	0.091	0.41	0.31	9.62
370	121	746	2.88	0.090	0.40	0.30	9.54
380	143	738	2.90	0.089	0.38	0.28	9.12

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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.