FRAGOLTHERM® 590

Heat Transfer Fluid
-40 °C up to 350 ° C

Application

FRAGOLTHERM® 590 is ideal for heating/cooling processes and shows a high thermal stability.

FRAGOLTHERM® 590 has a low viscosity in the low temperature range and can therefore be used between -40 °C and 290 °C in pressureless systems. The maximum bulk temperature can be increased up to 350 °C in pressurised systems. The film temperature at the heater must not exceed 370 °C.

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

Quality

FRAGOLTHERM® 590 is a synthetic heat transfer fluid based on aromatic methyl derivatives.

FRAGOLTHERM® 590 is characterized by a low viscosity, so that a good heat transfer and a good pumpability can be ensured even at low temperatures.

FRAGOLTHERM® 590 is non-corrosive and is compatible with materials conventionally used in heat transfer technology.

Packaging

FRAGOLTHERM® 590 is available as standard in steel drums and 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 maxi-mum 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® 590			Method
Density @ 20 °C	[kg/m³]	1008	
Viscosity @ 40 °C	[mm²/s]	3.32	
Viscosity @ 100 °C	[mm²/s]	1.33	
Pourpoint	[°C]	-57	ISO 3016
Flash point	[°C]	140	
Boiling point @ 1013 mbar	[°C]	290	
Max. film temperatur	[°C]	370	
Max. bulk temperatur	[°C]	350	
Dangerous goods according to IATA/IMDG/ADR	[-]	yes	

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Rodun International BV
WE ALWAYS HAVE A SOLUTION FOR YOU!

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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
-40		1052	1.43	0.137	313	330	3440
-30		1044	1.46	0.136	94.8	99.0	1063
-20		1037	1.49	0.135	38.1	39.5	436
-10		1030	1.52	0.134	19.2	19.8	225
0		1023	1.55	0.132	12.2	12.5	146
10		1015	1.58	0.131	8.24	8.36	101
20		1008	1.61	0.130	5.90	5.95	73.7
30		1001	1.64	0.129	4.31	4.31	54.8
40		994	1.67	0.127	3.32	3.30	43.4
50		986	1.70	0.126	2.69	2.65	35.8
60		979	1.73	0.125	2.28	2.23	30.9
70		972	1.76	0.124	1.95	1.90	26.9
80		965	1.79	0.122	1.71	1.65	24.2
90		958	1.81	0.121	1.50	1.44	21.5
100		950	1.84	0.120	1.33	1.26	19.4
110	1	943	1.87	0.119	1.19	1.12	17.6
120	1	936	1.90	0.117	1.07	1.00	16.3
130	1	929	1.93	0.116	0.98	0.91	15.1
140	1	921	1.96	0.115	0.89	0.82	14.0
150	2	914	1.99	0.114	0.82	0.75	13.1
160	3	907	2.02	0.112	0.76	0.69	12.4
170	4	900	2.05	0.111	0.71	0.64	11.8
180	6	892	2.08	0.110	0.67	0.60	11.3
190	9	885	2.11	0.109	0.63	0.56	10.8
200	12	878	2.14	0.107	0.59	0.52	10.4
210	16	870	2.17	0.106	0.56	0.49	10.0
220	21	863	2.20	0.105	0.53	0.46	9.58
230	27	856	2.23	0.104	0.51	0.44	9.36
240	35	849	2.26	0.102	0.49	0.42	9.22
250	44	842	2.29	0.101	0.47	0.40	8.97
260	55	834	2.31	0.100	0.45	0.38	8.67
270	69	827	2.34	0.099	0.43	0.36	8.41
280	84	820	2.37	0.097	0.42	0.34	8.41
290	103	813	2.40	0.096	0.41	0.33	8.33
300	125	805	2.43	0.095	0.39	0.31	8.03
310	149	798	2.46	0.094	0.38	0.30	7.94
320	178	791	2.49	0.092	0.37	0.29	7.92
330	210	784	2.52	0.091	0.36	0.28	7.82
340	247	776	2.55	0.090	0.35	0.27	7.70
350	288	769	2.58	0.089	0.34	0.26	7.58
360	335	762	2.61	0.087	0.33	0.25	7.54
370	389	754	2.64	0.086	0.32	0.24	7.41
380	444	747	2.67	0.085	0.31	0.23	7.27

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