Heatmax HT 62

Synthetic organic based heat transfer medium

Description

Heatmax 62 is a heat transfer medium suitable for non-pressure/low pressure indirect heating systems. In operation, HT 62 delivers a uniform and constant process temperature with no need for high pressures. Besides that Heatmax HT 62 possesses a very high boiling and flash point increasing the safety and reducing fluid consumption to a great extent. Heatmax HT 62 is known for its boiling point which reduces volatility and hence fluid leakage. Equipment running on Heatmax HT 62 show increased reliability and will eventually bear less maintenance costs. The fluid is non-corrosive to metals used in heat transfer systems.

Applications

Heatmax HT 62 is suitable for use in liquid phase in closed, forced circulation thermal systems as long as bulk temperature does not exceed 325 °C.

Benefits

- Low volatility
- Reduces fluid leakage
- High boiling point
- Maximum film temperature 355 °C
- Maximum bulk temperature 325 °C
- Excellent low temperature fluidity
- Enhanced safety
- Non corrosive

Typical performance data

	Test method	HT 62
Appearance	Visual	Clear liquid
Base oil nature		Isopropyl biphenyl
Kinematic viscosity @ 0 ºC, mm²/s, cSt		100
Kinematic viscosity @ 40 ºC, mm²/s ,cSt		11
Kinematic viscosity @ 100 ºC, mm2/s, cSt		2.46
Density @ 25 ºC, kg/dm³		0.950
Fire point, ºC	ASTM D-92	200
Auto-ignition temperature, ºC	ASTM E-659	>400
Pour point, ºC	ASTM D-97	<-40
Boiling point, ºC		>335
TAN, mg KOH/g	ASTM D664-81	<0.2
Chlorine content, ppm		<11
Moisture content (max), ppm	ASTM E203-75	200
Copper Corrosion	ASTM D-130	<1A
Coefficient of thermal expansion @ 200 ºC		0.00100
Pumpability @ 2000 mm²/s		<-20
Pumpability @ 300 mm²/s		<-10
Heat capacity @ 325 ºC, kJ/kg		261

Temp °C	Vapour Pressure kPa(abs)	Specific Density kg/m³	Heat Capacity kJ/kgK	Thermal Conductivity W/mK	Kinematic Viscosity mm²/s	Dynamic Viscosity mPas	Prandtl-Number
-10	0,0	975	1,870	0,125	291,00	284,00	4208,36
0	0,0	968	1,890	0,125	100,00	99,50	1512,36
10	0,0	961	1,930	0,124	47,00	45,20	700,49
20	0,0	954	1,950	0,123	25,60	24,50	385,51
30	0,0	947	1,960	0,122	15,80	15,00	241,41
40	0,0	940	2,010	0,121	11,00	10,10	165,97
50	0,0	933	2,020	0,120	7,69	7,18	120,47
60	0,0	926	2,060	0,120	5,81	5,38	92,29
70	0,0	918	2,080	0,119	4,54	4,17	72,74
80	0,0	911	2,110	0,118	3,66	3,33	59,49
90	0,0	904	2,120	0,117	3,01	2,72	49,39
100	0,1	897	2,140	0,116	2,46	2,26	41,77
110	0,1	890	2,170	0,115	2,14	1,90	35,97
120	0,2	882	2,190	0,114	1,84	1,62	31,18
130	0,2	875	2,210	0,113	1,59	1,39	27,21
140	0,4	867	2,230	0,112	1,39	1,21	23,99
150	0,6	859	2,260	0,111	1,23	1,06	21,51
160	0,8	852	2,290	0,110	1,09	0,93	19,23
170	1,2	844	2,310	0,109	0,98	0,82	17,37
180	1,8	836	2,330	0,108	0,88	0,73	15,75
190	2,4	828	2,350	0,107	0,79	0,66	14,32
200	3,4	820	2,370	0,106	0,72	0,59	13,12
210	4,7	812	2,380	0,105	0,65	0,53	11,99
220	6,4	803	2,400	0,104	0,60	0,48	11,05
230	8,6	795	2,420	0,103	0,55	0,44	10,23
240	11,5	786	2,440	0,101	0,50	0,40	9,49
250	15,2	777	2,460	0,100	0,47	0,36	8,85
260	19,6	768	2,470	0,099	0,43	0,33	8,24
270	25,2	759	2,490	0,098	0,40	0,30	7,72
280	32,1	750	2,510	0,097	0,37	0,28	7,27
290	40,7	740	2,530	0,095	0,35	0,26	6,84
300	50,9	730	2,540	0,094	0,33	0,24	6,45
310	63,3	720	2,570	0,092	0,31	0,22	6,11
320	78,0	710	2,590	0,091	0,29	0,21	5,81
325	86,3	705	2,610	0,090	0,28	0,20	5,69