

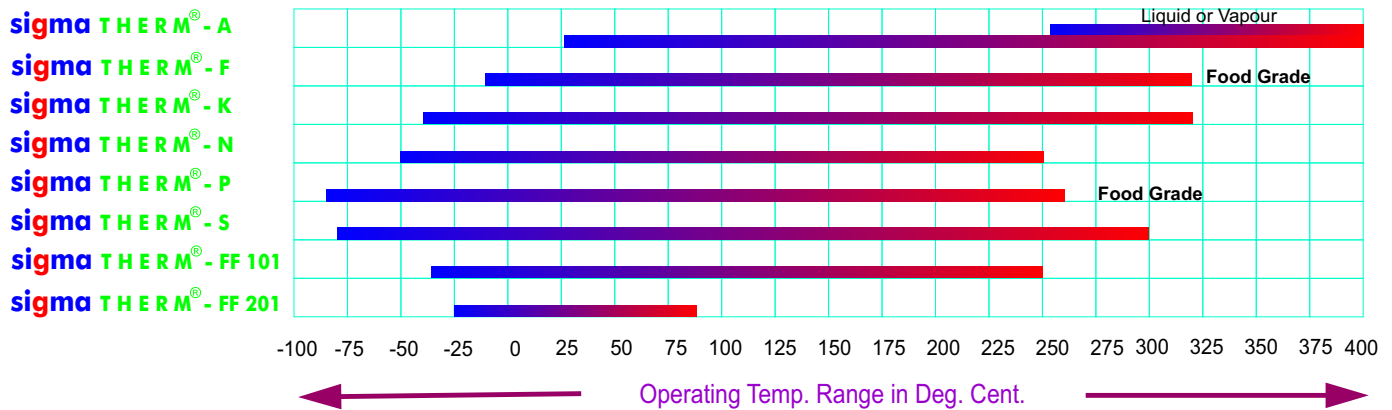
Single Fluid for Cooling and Heating

-50 °C to 250 °C

sigma THERM[®] - N

Synthetic Thermic Fluid

Thermic Fluid and other Speciality Range



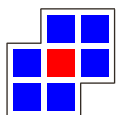
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Description :

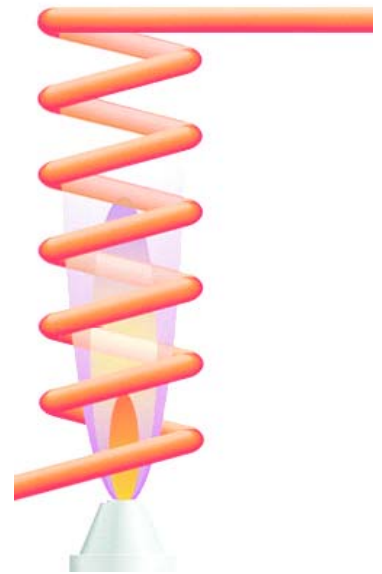
sigma THERM[®] - N is a high performance - synthetic organic heat transfer fluid. It is specially developed for cooling and heating purpose. Has excellent low temperature pumpability and outstanding thermal stability.

Application :

For un pressurized closed heat transfer systems from (- 50) °C to 250 °C in liquid phase. Suitable for Single Fluid Heating and Cooling system.

It can easily replace usage of water-glycol solution in solar heating and solar power generating system.

It is most suitable for Pharmaceutical companies where very low and high temperature is obtained with the single fluid.



Sigma
SYNTHETIC

Typical Properties :

Composition	100 % Synthetic
Appearance	Clear colorless to Light Yellow liquid
Kin. Vis. @ 40 °C	4+0.4 cSt
Max. Bulk Temperature	250 °C
Max. Film Temperature	280 °C
Pour Point	Well Below -70 °C
Specific Gravity @ 20 °C	0.86
Auto Ignition Temp.	Above 325 °C
Boiling Point	Above 280 °C
Flash Point	140 °C
Moisture Content	Below 150 ppm
Coefficient of Thermal Expansion	0.00107/ °C

Temperature °C	Density Kg/m ³	Thermal Conductivity W/m.K	Heat Capacity kJ/kg.K	Viscosity cSt	Vapour pressure (absolute)kPa
-50	909	0.134	1.64	857.97	
-40	902	0.132	1.68	276.15	
-30	895	0.131	1.72	109.94	
-20	888	0.130	1.76	51.63	
-10	881	0.129	1.80	27.61	
0	875	0.127	1.84	16.35	
10	868	0.126	1.88	10.53	
20	861	0.125	1.91	7.26	
30	854	0.124	1.95	4.71	
40	847	0.122	1.99	3.99	
50	840	0.121	2.03	3.14	
60	833	0.120	2.07	2.54	
70	826	0.118	2.10	2.11	
80	819	0.117	2.14	1.78	
90	812	0.116	2.18	1.54	
100	805	0.114	2.21	1.35	
110	798	0.113	2.25	1.21	
120	791	0.111	2.29	1.07	
130	784	0.110	2.32	0.96	
140	776	0.109	2.36	0.87	1
150	769	0.107	2.39	0.79	2
160	762	0.106	2.42	0.73	2
170	754	0.104	2.46	0.67	3
180	747	0.103	2.49	0.62	4
190	739	0.101	2.54	0.58	6
200	731	0.098	2.57	0.54	8
210	723	0.097	2.60	0.50	12
220	715	0.095	2.63	0.48	16
230	707	0.094	2.67	0.46	21
240	697	0.092	2.70	0.42	28
250	689	0.090	2.73	0.39	37
260	680	0.088	2.76	0.38	47
270	671	0.087	2.79	0.36	59
280	662	0.085	2.82	0.33	74

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