

The image features a background of a molecular structure with blue and white spheres connected by thin rods, set against a light blue and white geometric pattern. The logo 'sigmaTHERM® - L' is prominently displayed at the top right, with 'sigma' in blue, 'THERM' in green, and '- L' in red. Below the logo, the temperature range '0 °C TO 320 °C' is written in black. Further down, the text 'High Temperature Special Heat Transfer Fluid' is presented in a smaller black font. At the bottom left, the website address 'www.sigma-therm.com' is visible. The overall design is clean and technical, emphasizing the product's scientific nature.

**sigmaTHERM® - L**

**0 °C TO 320 °C**

High Temperature  
Special Heat Transfer Fluid

[www.sigma-therm.com](http://www.sigma-therm.com)

## Description:

**sigma THERM®- L** is a high-performance heat transfer fluid developed using advanced technology to create Modified/Engineered Hydrocarbons. This Premium base oil is used in formulation, offering thermal stability comparable to synthetic thermal fluids within a similar operating range. Its thermal stability is on par with synthetic thermal fluids operating within a similar temperature range.

## Application :

Indirect closed heat transfer systems : 0 °C to 320 °C

## Benefits :

- Higher Thermal Stability.
- Engineered for Longevity and lasting performance.
- Cost optimised Solution for maximum value.
- Effortless operations with minimum maintenance.
- Lowest level of Impurity

## Mixability :

**sigma THERM®- L** has undergone extensive laboratory testing with varying proportions of other thermal fluids at elevated temperatures to assess stability and related parameters.

Based on results it is proved that **sigma THERM®- L** could be used for top-up purpose in the systems already containing mineral based thermic fluids or Synthetic based thermic fluid.

## Compatibility :

**Metal :** **sigma THERM®- L** is compatible with all metals.

## Typical Properties :

Base oil	Modified / Engineered Hydrocarbon
Appearance	Water white
Max. Bulk Temperature	320 °C
Kin. Vis. @ 40 °C	30 ± 2 cSt
Specific Gravity @ 15 °C	0.85 ± 0.02
Flash Point ( COC)	210 – 225 °C
Fire Point	230 – 245 °C
Pour point	< (-10) °C
Moisture content	50 ppm
Total Acid No	<0.01 mg KOH/g

## Packing :

210 Ltrs

Temperature	Density	Specific Heat	Thermal Conductivity	Kinematic Viscosity	Vapour Pressure
°C	Kg/m <sup>3</sup>	kJ/Kg K	W/m·K	cSt	kPa
0	861	1.764	0.131	224	-
10	857	1.805	0.130	114	-
20	853	1.846	0.129	69	-
30	849	1.887	0.128	44.1	-
40	845	1.928	0.128	29.4	-
50	841	1.970	0.127	19.6	-
60	837	2.011	0.126	14.7	-
70	833	2.052	0.126	10.8	-
80	829	2.093	0.125	8.33	-
90	825	2.134	0.124	6.37	0.01
100	821	2.175	0.124	4.90	0.02
110	817	2.216	0.123	3.92	0.03
120	813	2.257	0.122	3.23	0.05
130	809	2.298	0.121	2.70	0.06
140	805	2.339	0.121	2.19	0.08
150	801	2.380	0.120	1.95	0.10
160	797	2.421	0.119	1.77	0.16
170	793	2.462	0.119	1.60	0.2
180	789	2.503	0.118	1.45	0.4
190	785	2.544	0.117	1.32	0.6
200	781	2.585	0.117	1.22	0.8
210	777	2.626	0.116	1.11	1.2
220	773	2.667	0.115	1.03	1.8
230	769	2.708	0.115	0.95	2.5
240	765	2.749	0.114	0.86	3.5
250	761	2.790	0.113	0.80	4.8
260	757	2.831	0.113	0.74	6.5
270	753	2.872	0.112	0.70	9
280	749	2.913	0.111	0.66	12
290	745	2.954	0.110	0.61	16
300	741	2.995	0.110	0.58	21
310	737	3.036	0.109	0.55	28
320	733	3.077	0.108	0.53	36

Note : Above data is for reference only

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