

Hi-Tech THERM ULTRA

PREMIUM SILICON SYNTHETIC THERMIC FLUID

Thermic Fluid technology used in USA, Europe, and Arabian countries

There are more than 100 companies in India which are providing thermic fluid in Indian market, but if you are looking for Ultra-performance latest technology thermic fluid which has excellent operating benefits, then your choice should be 'Hi-Tech Therm Ultra', The technology behind this product is 'low viscosity' very 'low carbon' and protection from chocking of heating coils. Generation Four Engitech Ltd. is the second largest company to sell this technology product in India. The viscosity and carbon percentage are two major bases in finalizing age and operating efficiency of any thermic fluid and technology of **Hi-Tech Therm Ultra** will benefit you in this regard.



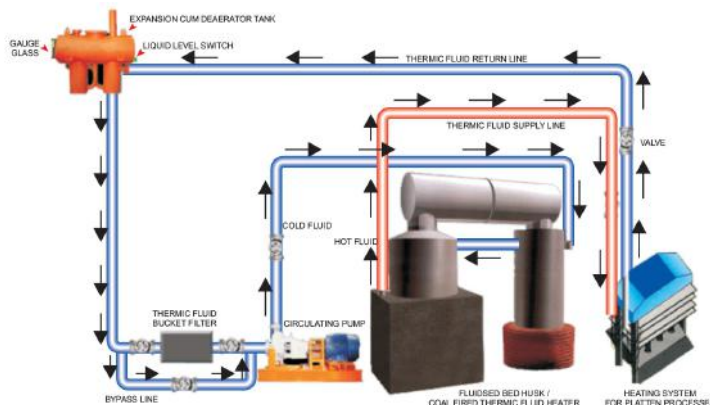
- High Oxidation Stability
- High Thermal Stability
- Has Long Life
- Almost Negligible Carbon Contents
- Lower Top Up Requirement
- Reduces Problem of Low and High Boilers

Physical Properties

 <p>Composition Mixture of synthetic fluid (100%)</p>	 <p>Kinematic Viscosity @ 40°C 22cSt</p>	 <p>Flash point (ASTM D-92) 210°C 410°F</p>	 <p>Total Acid Number 0.01 mg KOH/g</p>
 <p>Max. bulk Temperature 325°C 617°F</p>	 <p>Pour Point -35°C -31°F</p>	 <p>Boiling point @1013 mbar 365°C 689°F</p>	 <p>Moisture Content <90 ppm</p>

Operating Benefits of Hi-Tech Therm Ultra

- Large Operating Range Hi-Tech Therm Ultra is capable to work under the temperature range of **-15 to 325°C**.
- Good Flow Rate: Good heat transfer is directly dependent on flow rate and low viscosity of Hi-Tech Therm Ultra benefits in maintain better flow rate.
- Long Life: Generally we discard thermic fluid after the increase in viscosity and increase in carbon percentage. Hi-Tech Therm Ultra is approx. 30% less viscose then other Thermic fluid.
- Non Fouling: Less solid formation is the uniqueness of Hi-Tech Therm Ultra's technology and this should be the reason to go with this technology only.

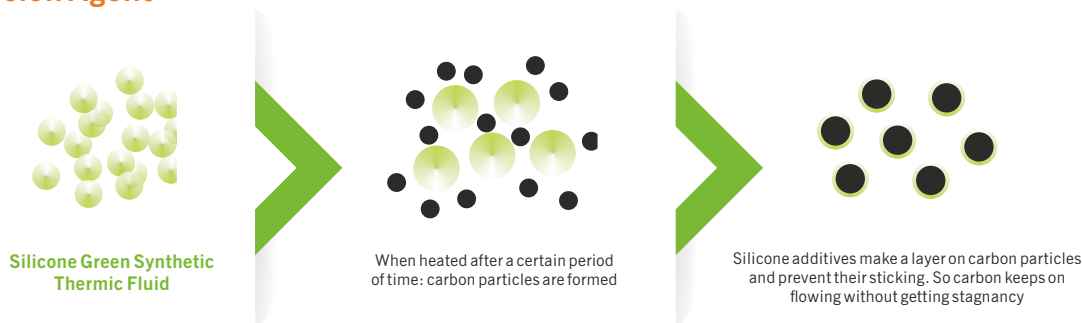


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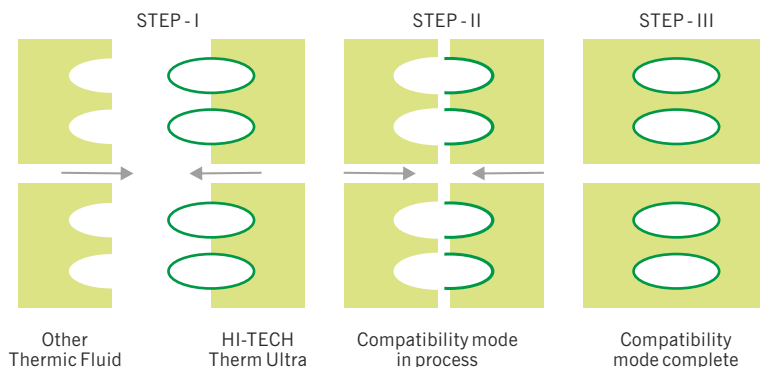
Working of Special Dispersion Agent

Less or more with organic chemistry, there will be carbon release in thermic fluid and Hi-Tech Therm Ultra will protect oil by stopping carbon to remain in nano-size, because of nano-size carbon remain in flow and will not reduce the efficiency of heat transfer area.



Compatibility Process With Other Thermic Fluid

Silicon green synthetic fluid Hi-Tech Therm Ultra is fully compatible with all type of mineral & synthetic based thermic fluid like : Hytherm 500-600, Shell Thermia B, Servotherm, Therminol-55 and so on. Because of low viscosity & silicon additive adding of Hi-tech Therm Ultra will increase overall performance of running oil. However lab confirmation is recommended for more safety.



Properties of Hi-Tech Therm Ultra with respect to Temperature

Temperature °C	Specific Heat kj/kg°K	Liquid Density g/ml	Liquid Viscosity cSt	Liquid Thermal Conductivity W/m.°K	Vapour Pressure mm-Hg
-30	1.791	0.907	1180.5	0.1402	-
-20	1.802	0.901	850	0.1389	-
-10	1.811	0.896	380	0.1377	-
0	1.813	0.889	159	0.1364	-
10	1.843	0.880	84	0.1352	-
20	1.867	0.876	48	0.1339	-
30	1.894	0.865	30	0.1326	0.00
40	1.935	0.860	22	0.1314	0.00
50	2.018	0.857	14.3	0.1301	0.00
60	2.044	0.845	10.34	0.1289	0.00
70	2.077	0.840	7.58	0.1276	0.00
80	2.101	0.838	6.98	0.1263	0.00
90	2.143	0.830	4.88	0.1251	0.00
100	2.179	0.823	3.82	0.1238	0.00
110	2.213	0.817	3.12	0.1225	0.00
120	2.228	0.810	2.78	0.1213	0.00
130	2.291	0.748	2.52	0.1200	0.15
140	2.311	0.793	2.00	0.1188	0.25
150	2.344	0.790	1.75	0.1175	0.46

Temperature °C	Specific Heat kj/kg°K	Liquid Density g/ml	Liquid Viscosity cSt	Liquid Thermal Conductivity W/m.°K	Vapour Pressure mm-Hg
160	2.379	0.782	1.53	0.1162	0.83
170	2.421	0.775	1.38	0.1150	1.26
180	2.480	0.768	1.20	0.1137	2.01
190	2.493	0.762	1.06	0.1124	3.18
200	2.535	0.755	0.90	0.1119	4.85
210	2.579	0.749	0.88	0.1099	7.30
220	2.599	0.739	0.85	0.1087	10.10
230	2.623	0.731	0.80	0.1074	15.09
240	2.651	0.724	0.72	0.1061	20.10
250	2.709	0.717	0.69	0.1049	30.30
260	2.736	0.710	0.65	0.1036	40.7
270	2.757	0.701	0.59	0.1023	59.3
280	2.814	0.694	0.54	0.1011	80.0
290	2.853	0.689	0.51	0.0998	108.0
300	2.891	0.678	0.50	0.0985	135.0
310	2.915	0.670	0.46	0.0973	186.0
320	2.951	0.662	0.42	0.0960	249
325	2.969	0.657	0.4	0.0955	280.5