

ISTPURE HT'S FLUID CARE PROGRAM

Coupling our ISTpure HT fluids with a fluid care program can extend the life of your systems significantly. It offers yearly testing of the heat transfer fluid in your system and tracks the changes in the fluid year to year so adjustments can be made to keep your systems working at its best.

BENEFITS OF CHOOSING ISTPURE HT

- High boiling, flash, and fire point
- Wide temperature range
- Low toxicity
- Excellent performance
- Safe to use
- Available throughout North America
- Cost-effective
- Total fluid care

PRODUCTION IDENTIFICATION AND PART NUMBER

TRADE NAME : ISTpure HT

Part #	Volume	Part #	Volume
330066	1 gal / 4.5 L	330068	5 gal / 20 L
330067	2.5 gal / 10 L	330069	55 gal / 205 L

PROCESS APPLICATIONS

- High-temperature applications
- Pharmaceutical
- Process cooling & heating
- Metal, plastic, textile & rubber manufacturing
- Paper & pulp manufacturing
- Petroleum industry

ISTPURE HT OVERVIEW

The ISTpure HT offers the process industry a versatile, practically nontoxic heat transfer fluid proven to be cost effective and thermally stable at temperatures up to 315° C (600° F). Unlike less-stable mineral oils, the ISTpure HT has demonstrated excellent performance over a wide range of temperatures without compromising system reliability or integrity – important factors in choosing a fluid with confidence for long-term use.

RECOMMENDED TEMPERATURE RANGES

Closed Systems : 0°C (32°F) to 315°C (600°F)

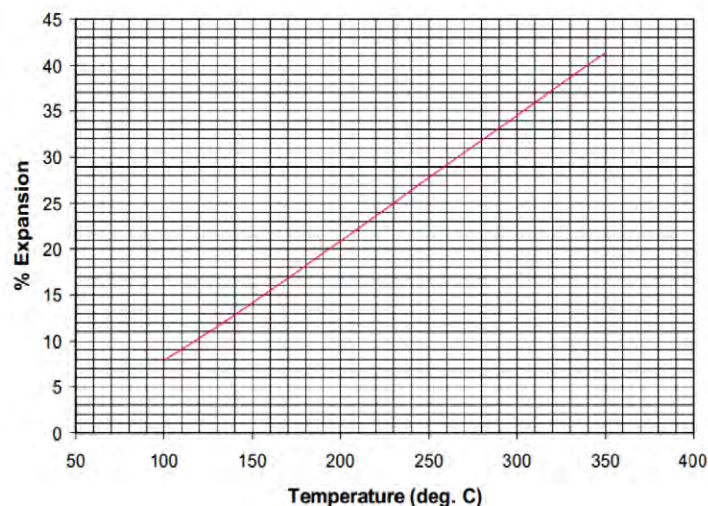
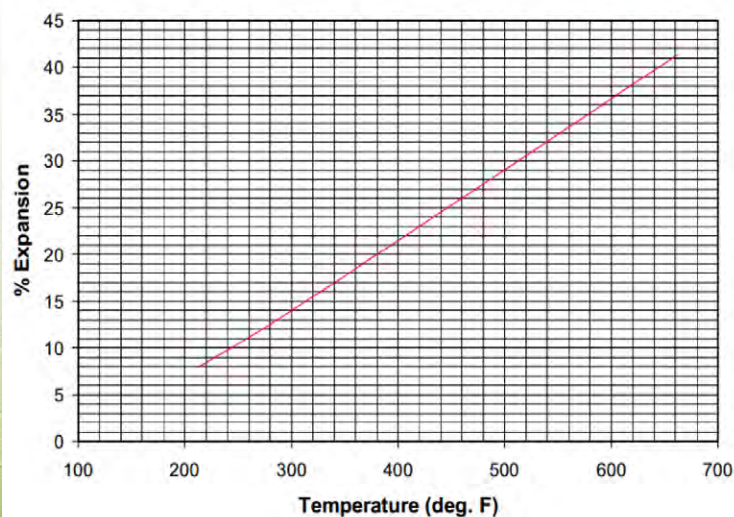
Open Systems : 20°C (68°F) to 150°C (300°F)

PROPERTIES OF ISTPURE HT

A comprehensive list of all thermo-physical properties of ISTpure HT can be found on page 2. For health and safety information or to request a Material Safety Data Sheet, contact our ISTpure HT sales representatives.

Composition	Synthetic alkylated aromatics
Appearance	Clear, light brown
Odor	Low odor
Pour Point	-60°C (-76°F)
Boiling Point	>330°C (>626°F)
Flash Point	180°C (356°F)
Autoignition Temp	330°C (626°F)
Max Film Temp	340°C (644°F)
Max Fluid Outlet Temp	315°C (600°F)
Min Pumpability Limit	-10°C (14°F)
Average Molecular Wt	300

TEMPERATURES VS % EXPANSION



UNITS CHARTS

IMPERIAL UNITS

Temp. (°F)	Viscosity (cP)	Thermal Cond. BTU/lb°F	Specific Heat BTU/lb°F	Density lb°/ft³	Temp. (°F)	Viscosity (cP)	Thermal Cond. BTU/lb°F	Specific Heat BTU/lb°F	Density lb°/ft³
32	160	0.0801	0.453	55.5	320	1.50	0.0730	0.592	48.8
40	108	0.0799	0.456	55.3	340	1.30	0.0724	0.602	48.3
60	49.0	0.0794	0.466	54.8	360	1.20	0.0719	0.612	47.8
80	27.0	0.0789	0.476	54.3	380	1.00	0.0714	0.621	47.4
100	17.0	0.0785	0.486	53.9	400	0.93	0.0708	0.631	46.9
120	11.0	0.0780	0.495	53.4	420	0.85	0.0703	0.641	46.4
140	8.20	0.0775	0.505	52.9	440	0.77	0.0697	0.650	46.0
160	6.20	0.0770	0.515	52.5	460	0.7	0.0692	0.660	45.5
180	4.80	0.0765	0.524	52.0	480	0.64	0.0586	0.670	45.0
200	3.90	0.0760	0.534	51.6	500	0.59	0.0681	0.680	44.6
220	3.20	0.0755	0.544	51.1	520	0.55	0.0675	0.689	44.1
240	2.70	0.0750	0.553	50.6	540	0.51	0.0669	0.669	43.6
260	2.30	0.0745	0.563	50.2	560	0.47	0.0664	0.709	43.2
280	1.90	0.0740	0.573	49.7	580	0.44	0.0658	0.718	42.7

METRIC UNITS

Temp. (°C)	Viscosity (mPa s)	Thermal Cond. W/m K	Specific Heat kJ/kg K	Density kg/m³	Temp. (°C)	Viscosity (mPa s)	Thermal Cond. W/m K	Specific Heat kJ/kg K	Density kg/m³
0	160	0.1361	1.894	890	160	1.50	0.1240	2.478	783
10	70.0	0.1354	1.930	884	170	1.30	0.1232	2.515	776
20	37.0	0.1347	1.967	877	180	1.20	0.1224	2.552	769
30	23.0	0.1340	2.003	870	190	1.10	0.1216	2.588	763
40	15.0	0.1332	2.040	863	200	1.00	0.1208	2.625	756
50	11.0	0.1325	2.076	857	210	0.88	0.1200	2.661	749
60	8.10	0.1318	2.113	850	220	0.81	0.1191	2.698	742
70	6.30	0.1310	2.150	843	230	0.75	0.1183	2.734	736
80	5.00	0.1303	2.186	836	240	0.69	0.1174	2.771	729
90	4.10	0.1295	2.223	830	250	0.64	0.1165	2.807	722
100	3.40	0.1287	2.259	823	260	0.59	0.1157	2.844	715
110	2.90	0.1280	2.296	816	270	0.55	0.1149	2.880	709
120	2.40	0.1272	2.332	810	280	0.51	0.1140	2.917	702
130	2.20	0.1264	2.369	803	290	0.48	0.1131	2.954	695
140	1.90	0.1256	2.405	796	300	0.45	0.1123	2.990	689
150	1.70	0.1248	2.442	789	310	0.42	0.1114	3.027	682
					315	0.41	0.1109	3.045	678