

**PRODUCT IDENTIFICATION AND PART NUMBER**

**TRADE NAME** : ISTpure HT      **PART #** : 330171, 330172, 330173, 330174

**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.

**BENEFITS OF CHOOSING ISTPURE HT**

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

**PRICE, QUANTITY, & AVAILABILITY**

**The ISTpure HT is offered in 1, 5, and 55 gallon containers.**

Pricing depends on quantity, however, IST will work with you to try and fit your budget.

**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.

### RECOMMENDED TEMPERATURE RANGES

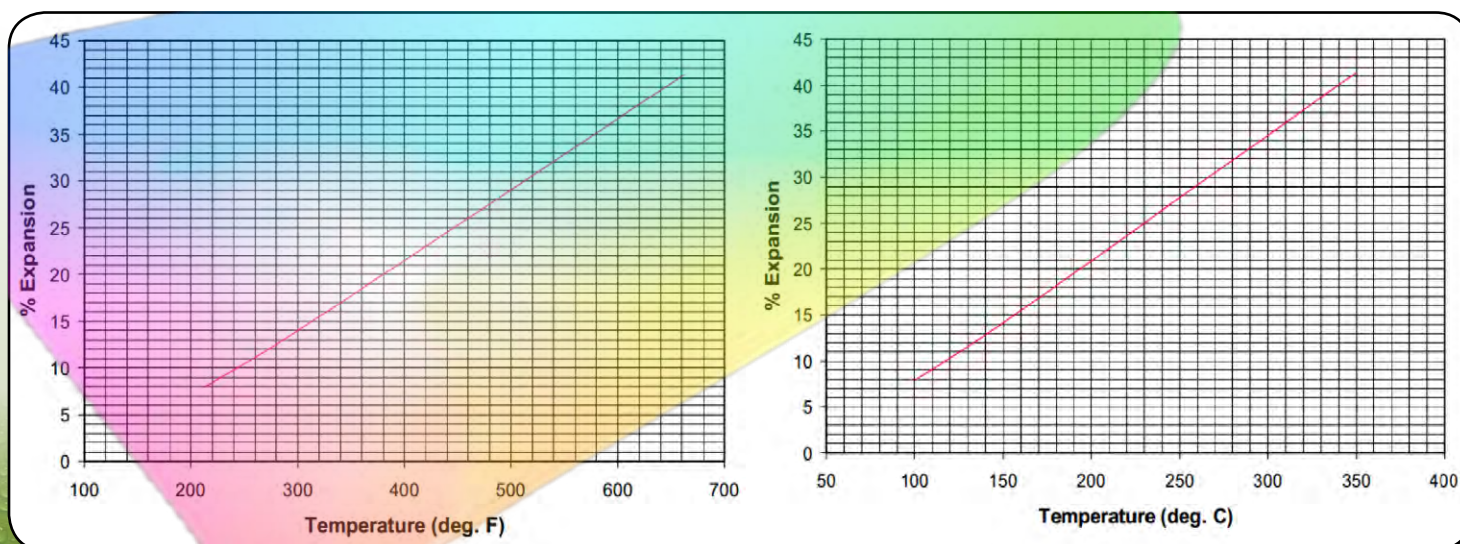
- Closed Systems :** 0°C (32°F) to 315°C (600°F)
- Open Systems :** 20°C (68°F) to 150°C (300°F)

### 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**
**US units**

Temperature °F	Viscosity cP	Thermal Cond. BTU/hr-ft-°F	Specific Heat BTU/lb-°F	Density lb/ft <sup>3</sup>
32	160	0.0801	0.453	55.5
40	108	0.0799	0.456	55.3
60	49.0	0.0794	0.466	54.8
80	27.0	0.0789	0.476	54.3
100	17.0	0.0785	0.486	53.9
120	11.0	0.0780	0.495	53.4
140	8.20	0.0775	0.505	52.9
160	6.20	0.0770	0.515	52.5
180	4.80	0.0765	0.524	52.0
200	3.90	0.0760	0.534	51.6
220	3.20	0.0755	0.544	51.1
240	2.70	0.0750	0.553	50.6
260	2.30	0.0745	0.563	50.2
280	1.90	0.0740	0.573	49.7
300	1.70	0.0735	0.583	49.2
320	1.50	0.0730	0.592	48.8
340	1.30	0.0724	0.602	48.3
360	1.20	0.0719	0.612	47.8
380	1.00	0.0714	0.621	47.4
400	0.93	0.0708	0.631	46.9
420	0.85	0.0703	0.641	46.4
440	0.77	0.0697	0.650	46.0
460	0.7	0.0692	0.660	45.5
480	0.64	0.0686	0.670	45.0
500	0.59	0.0681	0.680	44.6
520	0.55	0.0675	0.689	44.1
540	0.51	0.0669	0.699	43.6
560	0.47	0.0664	0.709	43.2
580	0.44	0.0658	0.718	42.7
600	0.41	0.0652	0.728	42.2

**SI units**

Temperature °C	Viscosity mPa·s	Thermal Cond. W/m·K	Specific Heat kJ/kg·K	Density kg/m <sup>3</sup>
0	160	0.1361	1.894	890
10	70.0	0.1354	1.930	884
20	37.0	0.1347	1.967	877
30	23.0	0.1340	2.003	870
40	15.0	0.1332	2.040	863
50	11.0	0.1325	2.076	857
60	8.10	0.1318	2.113	850
70	6.30	0.1310	2.150	843
80	5.00	0.1303	2.186	836
90	4.10	0.1295	2.223	830
100	3.40	0.1287	2.259	823
110	2.90	0.1280	2.296	816
120	2.40	0.1272	2.332	810
130	2.20	0.1264	2.369	803
140	1.90	0.1256	2.405	796
150	1.70	0.1248	2.442	789
160	1.50	0.1240	2.478	783
170	1.30	0.1232	2.515	776
180	1.20	0.1224	2.552	769
190	1.10	0.1216	2.588	763
200	1.00	0.1208	2.625	756
210	0.88	0.1200	2.661	749
220	0.81	0.1191	2.698	742
230	0.75	0.1183	2.734	736
240	0.69	0.1174	2.771	729
250	0.64	0.1166	2.807	722
260	0.59	0.1157	2.844	715
270	0.55	0.1149	2.880	709
280	0.51	0.1140	2.917	702
290	0.48	0.1131	2.954	695
300	0.45	0.1123	2.990	689
310	0.42	0.1114	3.027	682
315	0.41	0.1109	3.045	678