

Armcoltherm® 380

Temperature Range: -14°C ~ 380°C

Armcoltherm 380 is a liquid phase heat transfer fluid that is ideal for High temperature applications due to its exceptional thermal stability. It has been specifically designed to be used in liquid phase Heat transfer fluid systems at temperatures of up to 380°C (748°F).

Property	Unit	Result
Appearance	Visual	Clear liquid
Composition	-	Mixture of synthetic aromatics
Average molecular weight	-	190
Maximum bulk temperature	°C	380
Maximum film temperature	°C	400
Flash point	°C	132
Autoignition temperature	°C	603
Normal boiling point	°C	271
Pour point	°C	-18
Density @20°C	kg/m ³	1079
Viscosity, Kinematic @40°C	mm ² /s	5.74
Vapor pressured @360°C	Kpa	469
Vapor pressured @380°C	Kpa	623
Operating temperature range	°C	-14~380

Note: The above data are based upon test samples in laboratory, and not guaranteed for all products. For full specifications of ARMCOLTHERM® 380, please contact our sales dept.

Temperature		Liquid density	Liquid heat capacity	Liquid thermal conductivity	Liquid viscosity ^b		Vapor pressure ^c
°F	°C	kg/m ³	kJ/(kg·K)	W/(m·K)	cP (mPa·s)	cSt (mm ² /s)	kPa
7	-14	1110	1.460	0.144	3971	3580	—
14	-10	1106	1.471	0.143	383	346	—
32	0	1097	1.498	0.142	59.2	54.0	—
50	10	1088	1.525	0.141	24.4	22.4	—
68	20	1079	1.552	0.140	13.5	12.5	0.001
86	30	1070	1.579	0.138	8.68	8.11	0.002
104	40	1061	1.606	0.137	6.09	5.74	0.006
122	50	1052	1.634	0.136	4.52	4.30	0.013
140	60	1043	1.661	0.135	3.50	3.35	0.028
158	70	1034	1.688	0.134	2.79	2.70	0.056
176	80	1025	1.715	0.132	2.28	2.23	0.105
194	90	1016	1.742	0.131	1.90	1.87	0.189
212	100	1007	1.769	0.130	1.61	1.60	0.326
230	110	997	1.796	0.129	1.38	1.39	0.545
248	120	988	1.823	0.127	1.20	1.21	0.879
266	130	979	1.850	0.126	1.05	1.07	1.38
284	140	970	1.877	0.125	0.93	0.96	2.10
302	150	961	1.905	0.124	0.83	0.86	3.12
320	160	952	1.932	0.123	0.74	0.78	4.54
338	170	943	1.959	0.121	0.66	0.70	6.47
356	180	934	1.986	0.120	0.60	0.64	9.04
374	190	925	2.013	0.119	0.55	0.59	12.4
392	200	916	2.040	0.118	0.50	0.54	16.8
410	210	906	2.067	0.117	0.46	0.50	22.3
428	220	898	2.094	0.115	0.42	0.47	29.3
446	230	889	2.121	0.114	0.39	0.43	38.0
464	240	880	2.148	0.113	0.36	0.40	48.6
482	250	871	2.176	0.112	0.33	0.38	61.6
500	260	862	2.203	0.111	0.31	0.36	77.1
518	270	853	2.230	0.109	0.28	0.33	95.7
536	280	844	2.257	0.108	0.27	0.31	118
554	290	834	2.284	0.107	0.25	0.30	143
572	300	825	2.311	0.106	0.23	0.28	173
590	310	816	2.338	0.104	0.22	0.27	208
608	320	807	2.365	0.103	0.20	0.25	248
626	330	798	2.392	0.102	0.19	0.24	293
644	340	789	2.419	0.101	0.18	0.23	345
662	350	780	2.447	0.100	0.17	0.22	403
680	360	771	2.474	0.098	0.16	0.21	469
698	370	762	2.501	0.097	0.15	0.20	542
716	380	753	2.528	0.096	0.14	0.19	623

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ARMCOLTHERM
Heat transfer fluids

