

Armcoltherm® 608

Temperature: from -10°C to 320 °C

Aromatic synthetic heat transfer fluids are an excellent alternative to mineral oils due to their low kinematic viscosity and low operating environments. It is suitable for atmospheric or low-pressure heating systems, and can provide efficient and stable heat transfer performance under atmospheric pressure.

Property	Unit	Result
Appearance	Visual	Clear liquid
Composition	-	Synthetic aromatic mixture
Average molecular weight	-	166
Maximum bulk temperature	°C	320
Maximum film temperature	°C	345
Flash point, PMCC (ASTM D93)	°C	166
Autoignition temperature	°C	447
Normal boiling point	°C	328
Pour point	°C	-35
Coefficient of thermal expansion CC/CC	°C	0.000891
Density @20°C	kg/m ³	1007
Viscosity, Kinematic @40°C	mm ² /s	10.2
Viscosity, Kinematic @100°C	mm ² /s	2.01
Liquid heat capacity @300°C	kJ/kg.k	2.74
Liquid thermal conductivity @300°C	W/m.k	0.101
Vapor pressured @300°C	Kpa	97.5
Pseudocritical temperature	°C	430.8
Pseudocritical pressure	bar	29.6
Pseudocritical density	kg/m ³	296

Temperature		Density	Specific Heat		Thermal Conductivity		Viscosity	Vapor Pressure			Fluid Enthalpy
°F	°C	kg/m ³	kcal/ kg•°C	kJ/kg•K	Kcal/ m•hr•°C	W/m•K	mm ² /s	kgf/cm ²	kPa	psia	kJ/kg
-40	-40	1050	0.376	1.57	0.112	0.130	4150	-	-	-	-55.1
-4	-20	1037	0.392	1.64	0.110	0.128	2015	-	-	-	-21.3
32	0	1021	0.407	1.70	0.109	0.126	112.3	-	-	-	13.7
68	20	1007	0.423	1.77	0.107	0.124	19.9	-	-	-	50.8
104	40	971	0.443	1.85	0.106	0.123	10.2	-	-	-	88.8
140	60	956	0.459	1.92	0.104	0.121	6.02	-	-	-	128.9
176	80	943	0.474	1.98	0.103	0.120	4.01	-	-	-	170.6
212	100	928	0.498	2.08	0.102	0.119	2.01	-	-	-	213.5
248	120	914	0.520	2.12	0.102	0.118	1.42	0.004	0.43	0.062	257.9
284	140	900	0.522	2.18	0.100	0.116	1.11	0.012	1.21	0.175	302.9
320	160	887	0.538	2.25	0.098	0.114	0.85	0.023	2.22	0.322	350.9
356	180	871	0.562	2.35	0.097	0.112	0.74	0.046	4.53	0.657	399.7
392	200	858	0.574	2.40	0.095	0.110	0.66	0.084	8.20	1.19	449.6
428	220	843	0.586	2.45	0.093	0.108	0.60	0.148	14.5	2.10	501.3
464	240	826	0.605	2.53	0.091	0.106	0.56	0.256	25.1	3.64	555.2
500	260	813	0.622	2.60	0.090	0.104	0.52	0.426	41.8	6.06	608.2
536	280	799	0.641	2.68	0.088	0.103	0.49	0.664	65.1	9.44	669.2
572	300	781	0.656	2.74	0.087	0.101	0.44	0.994	97.5	14.1	716.2
608	320	766	0.675	2.82	0.085	0.099	0.40	1.42	139	20.2	755.1
644	340	752	0.689	2.88	0.084	0.098	0.37	2.22	218	31.6	806.5
653	345	748	0.692	2.90	0.083	0.097	0.36	2.52	248	36.0	820.6

*The above data are based on laboratory testing and not all product data are the same.

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