

Armcoltherm® 550

Temperature: from -25°C to 315°C

Armcoltherm 550 heat transfer oil has a maximum operating temperature of 315 °C , excellent thermal stability, and is extremely difficult to produce carbon deposition and thermal cracking. It can safely, effectively and stably provide the required heat for the equipment. It has a low pour point and can be used in a low environment and save energy. It has no odor, is non-corrosive to metals, has a high boiling point, and is used in atmospheric pressure heat transfer systems.

Property	Unit	Result
Appearance	Visual	Clear liquid
Composition	-	Synthetic hydrocarbon mixture
Average molecular weight	-	320
Recommended bulk temperature	°C	300
Maximum extended use temperature	°C	315
Maximum film temperature	°C	335
Flash point	°C	193
Autoignition temperature	°C	366
Normal boiling point	°C	365
Pour point	°C	-55
Coefficient of thermal expansion CC/CC	°C	0.000961
Density @20°C	kg/m ³	868
Viscosity, Kinematic @40°C	mm ² /s	19.8
Viscosity, Kinematic @100°C	mm ² /s	3.52
Liquid heat capacity @300°C	kJ/kg.k	2.90
Liquid thermal conductivity @300°C	W/m.k	0.096
Vapor pressured @300°C	Kpa	34.4
Pseudocritical temperature	°C	512
Pseudocritical pressure	bar	13.2
Pseudocritical density	kg/m ³	258

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
-18	-30	904	0.413	1.72	0.116	0.134	2010	-	-	-	-18.8
-4	-20	899	0.421	1.76	0.115	0.133	841	-	-	-	-3.9
28	-10	892	0.431	1.80	0.114	0.132	346	-	-	-	13.9
32	0	885	0.438	1.83	0.113	0.131	162	-	-	-	32.0
68	20	868	0.457	1.91	0.111	0.128	47.7	-	-	-	69.4
104	40	858	0.474	1.98	0.109	0.126	19.8	-	-	-	108.3
140	60	845	0.490	2.05	0.107	0.124	9.39	-	-	-	148.6
176	80	831	0.507	2.12	0.105	0.121	5.43	0.0001	0.011	0.0016	190.2
212	100	818	0.524	2.19	0.103	0.119	3.52	0.0003	0.032	0.0046	233.3
248	120	804	0.541	2.26	0.101	0.117	2.49	0.0009	0.088	0.0128	277.9
284	140	790	0.557	2.33	0.099	0.114	1.87	0.002	0.219	0.0318	323.8
320	160	777	0.574	2.40	0.097	0.112	1.47	0.005	0.50	0.0726	371.2
356	180	763	0.591	2.47	0.095	0.110	1.20	0.011	1.07	0.155	420.0
392	200	748	0.608	2.54	0.093	0.107	1.01	0.022	2.15	0.312	470.1
428	220	734	0.624	2.61	0.091	0.105	0.85	0.041	4.07	0.590	521.7
464	240	719	0.641	2.68	0.089	0.103	0.73	0.075	7.37	1.07	574.7
500	260	704	0.658	2.75	0.087	0.101	0.64	0.131	12.8	1.86	629.1
536	280	688	0.677	2.83	0.085	0.098	0.56	0.217	21.3	3.09	684.9
572	300	672	0.694	2.90	0.083	0.096	0.50	0.351	34.4	4.99	742.1
608	320	655	0.711	2.97	0.081	0.093	0.44	0.548	53.7	7.79	800.7
635	335	643	0.724	3.03	0.079	0.092	0.40	0.695	68.2	9.89	844.7

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

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