

표. 단일냉매성분의 물성

Refrigerant Number	Chemical Name	Chemical Formula	Molecular weight	Boiling point T. (°C)	Critical T. (°C)	Critical P. (MPa)	Vaporization heat at 0°C (kJ/kg)	Specific volume at 0°C (m <sup>3</sup> /kg)		Viscosity at 0°C (μpoises)		Thermal conductivity at 0°C (W/m · K)	
								sat. liq.	sat. vap.	sat. liq.	sat. vap.	sat. liq.	sat. vap.
22	Chlorodifluoromethane	CHF <sub>2</sub> Cl	86.47	-40.81	96.15	4.990	205.0	0.00078	0.04672	2194	117.1	0.09671	0.01001
23	Trifluoromethane	CHF <sub>3</sub>	72.01	-82.10	25.92	4.836	137.1	0.00097	0.00854	828.9	153.1	0.07858	0.01287
32	Difluoromethane	CH <sub>2</sub> F <sub>2</sub>	52.02	-51.65	78.11	5.782	315.3	0.00095	0.04550	1596	114.8	0.15180	0.01237
125	Pentafluoroethane	C <sub>2</sub> HF <sub>5</sub>	120.02	-48.14	66.18	3.629	132.9	0.00076	0.02375	2024	124.3	0.07163	0.01225
143a	1,1,1-Trifluoroethane	CF <sub>3</sub> -CH <sub>3</sub>	84.04	-47.22	72.89	3.776	188.1	0.00098	0.03661	1621	107.9	0.08500	0.01256
290	Propane	C <sub>3</sub> H <sub>8</sub>	44.10	-42.09	96.70	4.248	374.5	0.00189	0.09652	1248	77.14	0.10640	0.01630
218	Octafluoropropane	C <sub>3</sub> F <sub>8</sub>	188.03	-36.75	71.95	2.680	85.1	0.00069	0.02446	2584	120.2	0.04659	0.01215
270	Cyclopropane	C <sub>3</sub> H <sub>6</sub>	42.08	-32.90	125.15	5.580	420.2	0.00152	0.14310	1902	80.26	0.16110	0.01332
134a	1,1,1,2-Tetrafluoroethane	CF <sub>3</sub> -CH <sub>2</sub> F	102.03	-26.07	101.06	4.059	198.6	0.00077	0.06935	2857	109.4	0.09389	0.01185
134	1,1,2,2-Tetrafluoroethane	CHF <sub>2</sub> -CHF <sub>2</sub>	102.03	-19.81	118.95	4.562	206.9	0.00073	0.09182	3451	109.6	0.10330	0.01235
152a	1,1-Difluoroethane	CHF <sub>2</sub> -CH <sub>3</sub>	66.05	-24.02	113.26	4.517	307.1	0.00104	0.11960	2172	93.83	0.11800	0.01237

표. 단일냉매성분의 물성(계속)

Refrigerant Number	Chemical Name	Chemical Formula	Molecular weight	Boiling point T. (°C)	Critical T. (°C)	Critical P. (MPa)	Vaporization heat at 0°C (kJ/kg)	Specific volume at 0°C (m <sup>3</sup> /kg)		Viscosity at 0°C (μpoises)		Thermal conductivity at 0°C (W/m · K)	
								sat. liq.	sat. vap.	sat. liq.	sat. vap.	sat. liq.	sat. vap.
227ea	1,1,1,2,3,3,3-Heptafluoropropane	CF <sub>3</sub> -CHF-CF <sub>3</sub>	170.03	-15.61	101.74	2.929	124.8	0.00068	0.06225	3828	109.3	0.06050	0.01129
245cb	1,1,1,2,2-Pentafluoropropane	CF <sub>3</sub> -CF <sub>2</sub> -CH <sub>3</sub>	134.06	-17.59	106.93	3.137	151.6	0.00079	0.0763	3056	102.0	0.07088	0.01166
600a	Isobutane	CH(CH <sub>3</sub> ) <sub>3</sub>	58.12	-11.61	134.70	3.640	355.7	0.00172	0.2357	2043	69.18	0.10640	0.01463
318	Perfluorocyclobutane	C <sub>4</sub> F <sub>8</sub>	200.03	-5.98	115.23	2.778	114.5	0.00062	0.0821	5370	108.4	0.05704	0.01086
236ea	1,1,1,2,3,3-Hexafluoropropane	CF <sub>3</sub> -CHF-CHF <sub>2</sub>	152.04	6.19	139.29	3.502	168.1	0.00067	0.1831	5565	101.8	0.08095	0.01071
600	n-Butane	C <sub>4</sub> H <sub>10</sub>	58.12	-0.54	152.01	3.796	385.3	0.00167	0.3619	2004	68.29	0.17200	0.01481
E134	Bis(difluoromethyl)-ether	CHF <sub>2</sub> -O-CHF <sub>2</sub>	118.03	6.17	147.10	4.228	219.1	0.00069	0.2408	4279	101.5	0.10410	0.01080
E245	1,1-Difluoro-1-trifluoromethane	CF <sub>3</sub> -CF <sub>2</sub> -OCH <sub>3</sub>	150.05	29.20	170.88	3.420	195.1	0.00069	0.5052	5910	92.53	0.08789	0.01052
601	n-Pentane	C <sub>5</sub> H <sub>12</sub>	72.15	36.07	196.36	3.360	384.5	0.00155	1.265	2827	62.65	0.1225	0.0133
601a	iso-Pentane	C <sub>4</sub> H <sub>9</sub> -CH <sub>3</sub>	72.15	27.84	187.36	3.371	363.2	0.00156	0.8911	3053	61.64	0.1179	0.01279