

## HCFC-22 및 대체 혼합냉매의 물성

Refrigerant number		HCFC-22	R-407C	R-410A	R-410B	FX220	
Composition (wt.%)	HCFC-22	100	-	-	-	-	
	HCFC-23	-	-	-	-	4.5	
	HFC-32	-	23	50	45	21.5	
	HFC-125	-	25	50	55	-	
	HFC-134a	-	52	-	-	74	
Critical Temperature (°C)		96.15	97.5	84.9	84.1	102.0	
Temperature Glide at 101.325 kPa (°C)		-	7.25	0.01	0.05	9.33	
Condensing pressure at 54.4°C (kPa)		2146	2453	3394	3368	2295	
Evaporating pressure at 7.2°C (kPa)		625.4	587.4	1003	995.4	513.1	
Pressure ratio		3.43	4.18	3.38	3.38	4.47	
Vaporization heat at 0°C (kJ/kg)		205.0	211.5	226.3	216.1	227.2	
Specific volume (m <sup>3</sup> /kg)	0°C	sat. liq.	0.00078	0.00081	0.00085	0.00084	0.00081
		sat. vap.	0.04672	0.05128	0.03318	0.03202	0.06199
	40°C	sat. liq.	0.00089	0.00093	0.00102	0.00101	0.00093
		sat. vap.	0.01487	0.01486	0.01004	0.00965	0.01793
Viscosity (μpoises)	0°C	sat. liq.	2194	2210	1716	1737	2304
		sat. vap.	117.1	114.3	119.2	119.7	112.5
	40°C	sat. liq.	1463	1329	997	1007	1405
		sat. vap.	141.9	139.1	150.6	151.8	135.4
Thermal conductivity (W/m · K)	0°C	sat. liq.	0.09671	0.1032	0.1153	0.1113	0.1076
		sat. vap.	0.01001	0.01143	0.01147	0.01143	0.01146
	40°C	sat. liq.	0.07783	0.07913	0.08363	0.08068	0.08306
		sat. vap.	0.01260	0.01413	0.01393	0.01391	0.01421