



Suva[®]

refrigerants

Physical Property Data for Suva[®] 407C, Suva[®] 410A, and Freon[®] 22

Property	Suva [®] 407C	Suva [®] 410A	Freon [®] 22
Refrigerant Number	R-407C	R-410A	R-22
Replaces	R-22	R-22	N/A
Chemical Formula/Composition	R32/R125/R134a 23/25/52 wt%	R32/R125 50/50 wt%	CHClF ₂
CAS Number	R32:75-10-5 R125:354-33-6 R134a:811-97-2	R32:75-10-5 R125:354-33-6	75-45-6
Molecular Weight	86.2	72.58	86.47
Boiling Point at 1 atm, °F (°C)	-46.4 (-43.56)	-60.76 (-51.53)	-41.4 (-40.8)
Liquid Density at 77°F (25°C), lb/ft ³ (kg/m ³)	70.8 (1134)	66.32 (1062)	74.53 (1195)
Vapor Pressure of Satd. Liquid at 77°F (25°C), psia (kPa)	170.3 (1174)	239.7 (1653)	151.4 (1043)
Heat Capacity of Liquid at 77°F (25°C), Btu/lb °F (kJ/kgK)	0.367 (1.54)	0.44 (1.84)	0.296 (1.24)
Heat Capacity of Vapor at 1 atm at 77°F (25°C), Btu/lb °F (kJ/kgK)	0.198 (0.829)	0.199 (0.833)	0.157 (0.657)
Thermal Conductivity of Liquid at 77°F (25°C), Btu/hr.ft °F (W/mK)	0.0455 (0.0819)	0.0511 (0.0886)	0.0458 (0.0849)
Thermal Conductivity of Vapor at 1 atm (101.3 kPa), Btu/hr.ft°F (W/mK)	0.00758 (0.01314)	0.00772 (0.01339)	0.00621 (0.01074)
Critical Temperature, °F (°C)	188.13 (86.74)	161.83 (72.13)	205.24 (96.24)
Critical Pressure, psia (kPa)	669.95 (4619)	714.5 (4926.1)	722.39 (4981)
AEL/TLV, 8- or 12-hr TWA, ppm	1,000	1,000	1,000
ODP, CFC-12=1	0	0	0.05
GWP, CO ₂ =1	1,526	1,725	1,500
ASHRAE Safety Classification	A1/A1	A1/A1	A1
Refrigerant Cylinder Color, PMS Code	471	507	352
Refrigerant Number	R-407C	R-410A	R-22