

RS-44 & RS-45 COMPARATIVE PHYSICAL PROPERTIES

| PROPERTY | UNITS | R22 | RS-44 | RS-45 | R407C |
|-----------------------------------------------|-------------------|-------|----------|----------|----------|
| Molecular Weight | | 86.5 | 108.1 | 105.1 | 86.2 |
| Boiling point at 1 atm | °C | -40.8 | -38.7(1) | -44.4(1) | -43.7(1) |
| | °F | -41.4 | -37.6(1) | -47.9(1) | -46.7(1) |
| Critical Temperature | °C | 96.1 | 88.8 | 77.9 | 87.3 |
| | °F | 204.8 | 191.8 | 172.2 | 189.1 |
| Critical Pressure | bara | 49.9 | 40.4 | 38.7 | 48.2 |
| | psia | 724 | 586 | 561 | 699 |
| Liquid Density at 25°C | kg/m ³ | 1191 | 1169 | 1104 | 1153 |
| Latent Heat of Vaporisation at boiling point | kJ/kg | 234 | 196(1) | 183(1) | 250(1) |
| Vapour Pressure at 25°C | bara | 10.4 | 9.67(1) | 11.7(1) | 12.0 |
| | psia | 151 | 140.2(1) | 170(1) | 173.3 |
| Discharge temperature (2) | °C | 104.7 | 79 | 77 | 92.5 |
| Discharge pressure (2) | bara | 17.91 | 15.96 | 19.5 | 19.3 |
| Specific heat of liquid at 25°C | kJ/kgK | 1.26 | 1.43 | 1.48 | 1.48 |
| Ozone Depletion Potential | ODP | 0.055 | 0 | 0 | 0 |
| Flammability limit in air at 1 atm | vol% | none | none | none | none |
| Inhalation exposure (8 h day & 40 h week) | ppm | 1000 | 1000 | 1000 | 1000 |
| Temperature glide | | 0 | 4 | 1.5 | 6 |
| (1) Bubble point | | | | | |
| (2) Evaporator temp 7°C & condenser temp 45°C | | | | | |

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