

3,3,3-Trifluoropropene

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| Other names: | 1,1,1-Trifluoropropene |
| | 1,1,1-trifluoro-2-propene |
| | 1-Propene, 3,3,3-trifluoro- |
| | 3,3,3-Trifluoro-1-propene |
| | 3,3,3-Trifluoropropylene |
| | Propene, 3,3,3-trifluoro- |
| | R-1243zf |
| | Tifluoromethylethylene |
| Inchi: | InChI=1S/C3H3F3/c1-2-3(4,5)6/h2H,1H2 |
| InchiKey: | FDMFUZH CIRHG RG-UHFFFAOYSA-N |
| Formula: | C3H3F3 |
| SMILES: | C=CC(F)(F)F |
| Mol. weight [g/mol]: | 96.05 |
| CAS: | 677-21-4 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|-----------------|---------|----------------|
| chg | -1532.00 ± 6.70 | kJ/mol | NIST Webbook |
| gf | -519.37 | kJ/mol | Joback Method |
| hf | -614.20 ± 6.70 | kJ/mol | NIST Webbook |
| hfus | 4.07 | kJ/mol | Joback Method |
| hvap | 22.00 | kJ/mol | NIST Webbook |
| ie | 11.24 ± 0.04 | eV | NIST Webbook |
| ie | 10.95 | eV | NIST Webbook |
| ie | 10.90 | eV | NIST Webbook |
| log10ws | -1.59 | | Crippen Method |
| logp | 1.735 | | Crippen Method |
| mcvol | 54.140 | ml/mol | McGowan Method |
| pc | 3609.00 ± 7.00 | kPa | NIST Webbook |
| rinpol | 315.00 | | NIST Webbook |
| tb | 255.00 | K | NIST Webbook |
| tc | 378.59 ± 0.20 | K | NIST Webbook |
| tf | 126.00 | K | Joback Method |
| vc | 0.228 | m3/kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|--------|---------|-----------------|---|
| cpg | 78.97 | J/molxK | 259.30 | Joback Method |
| cpg | 85.02 | J/molxK | 283.42 | Joback Method |
| cpg | 90.76 | J/molxK | 307.53 | Joback Method |
| cpg | 96.18 | J/molxK | 331.65 | Joback Method |
| cpg | 101.32 | J/molxK | 355.77 | Joback Method |
| cpg | 106.17 | J/molxK | 379.88 | Joback Method |
| cpg | 110.74 | J/molxK | 404.00 | Joback Method |
| pvap | 174.00 | kPa | 261.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 103.00 | kPa | 248.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 108.00 | kPa | 249.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 117.00 | kPa | 251.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 127.00 | kPa | 253.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |

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| pvap | 138.00 | kPa | 255.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 149.00 | kPa | 257.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 161.00 | kPa | 259.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 99.00 | kPa | 247.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 188.00 | kPa | 263.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 202.00 | kPa | 265.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 217.00 | kPa | 267.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |

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| pvap | 234.00 | kPa | 269.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 251.00 | kPa | 271.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 269.00 | kPa | 273.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 288.00 | kPa | 275.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 308.00 | kPa | 277.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 329.00 | kPa | 279.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 351.00 | kPa | 281.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |

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| pvap | 374.00 | kPa | 283.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 399.00 | kPa | 285.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 424.00 | kPa | 287.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 451.00 | kPa | 289.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 479.00 | kPa | 291.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 509.00 | kPa | 293.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 539.00 | kPa | 295.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |

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| pvap | 572.00 | kPa | 297.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 606.00 | kPa | 299.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 641.00 | kPa | 301.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 677.00 | kPa | 303.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 715.00 | kPa | 305.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 755.00 | kPa | 307.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 796.00 | kPa | 309.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |

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| pvap | 839.00 | kPa | 311.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 883.00 | kPa | 313.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 930.00 | kPa | 315.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 978.00 | kPa | 317.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 1028.00 | kPa | 319.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 1080.00 | kPa | 321.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 1133.00 | kPa | 323.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |

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| pvap | 1189.00 | kPa | 325.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 1247.00 | kPa | 327.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 1306.00 | kPa | 329.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 1369.00 | kPa | 331.16 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 1432.00 | kPa | 333.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 1498.00 | kPa | 335.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 1567.00 | kPa | 337.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |

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| pvap | 1638.00 | kPa | 339.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 1711.00 | kPa | 341.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 1787.00 | kPa | 343.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 1865.00 | kPa | 345.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 1945.00 | kPa | 347.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 2030.00 | kPa | 349.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 2116.00 | kPa | 351.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |

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| pvap | 2205.00 | kPa | 353.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 53.00 | kPa | 233.80 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 67.00 | kPa | 238.36 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 84.00 | kPa | 243.30 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 104.00 | kPa | 248.26 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 128.00 | kPa | 253.29 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 156.00 | kPa | 258.19 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |

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| pvap | 189.00 | kPa | 263.27 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 225.00 | kPa | 268.16 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 269.00 | kPa | 273.12 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 316.00 | kPa | 277.88 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 371.00 | kPa | 282.84 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 434.00 | kPa | 287.82 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 589.00 | kPa | 298.16 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |

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| pvap | 678.00 | kPa | 303.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 776.00 | kPa | 308.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 884.00 | kPa | 313.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 1003.00 | kPa | 318.15 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 1133.00 | kPa | 323.16 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 1277.00 | kPa | 328.17 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 1432.00 | kPa | 333.13 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |

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| pvap | 1598.00 | kPa | 338.03 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 1782.00 | kPa | 343.02 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 1986.00 | kPa | 348.08 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 2197.00 | kPa | 352.94 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 2432.00 | kPa | 357.94 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 2697.00 | kPa | 363.14 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 2960.00 | kPa | 367.90 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |

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| pvap | 3255.00 | kPa | 372.86 | Saturated pressure measurements of 3,3,3-trifluoroprop-1-ene (R1243zf) for reduced temperatures ranging from 0.62 to 0.98 |
| pvap | 268.80 | kPa | 273.17 | Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system |
| pvap | 318.40 | kPa | 278.17 | Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system |
| pvap | 373.60 | kPa | 283.16 | Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system |
| pvap | 437.60 | kPa | 288.16 | Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system |

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|------|--------|-----|--------|---|
| pvap | 510.00 | kPa | 293.15 | Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system |
| pvap | 590.10 | kPa | 298.15 | Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system |
| pvap | 678.20 | kPa | 303.15 | Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system |
| pvap | 776.70 | kPa | 308.15 | Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system |
| pvap | 883.60 | kPa | 313.15 | Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system |

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|------|---------|-----|--------|---|
| pvap | 1001.80 | kPa | 318.15 | Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system |
| pvap | 1130.40 | kPa | 323.14 | Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system |
| pvap | 1274.90 | kPa | 328.14 | Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system |
| pvap | 1431.60 | kPa | 333.14 | Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system |
| pvap | 1600.50 | kPa | 338.14 | Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system |

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| pvap | 1785.70 | kPa | 343.14 | Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system |
| pvap | 1986.40 | kPa | 348.13 | Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system |
| pvap | 2203.10 | kPa | 353.13 | Experimental measurements of saturated vapor pressure and isothermal vapor-liquid equilibria for 1,1,1,2-Tetrafluoroethane (HFC-134a) + 3,3,3-trifluoropropene (HFO-1243zf) binary system |
| pvap | 815.40 | kPa | 310.00 | Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf) |
| pvap | 815.10 | kPa | 310.00 | Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf) |
| pvap | 927.20 | kPa | 315.00 | Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf) |
| pvap | 1050.10 | kPa | 320.00 | Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf) |

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| pvap | 1185.60 | kPa | 325.00 | Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf) |
| pvap | 1333.10 | kPa | 330.00 | Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf) |
| pvap | 1494.30 | kPa | 335.00 | Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf) |
| pvap | 1669.50 | kPa | 340.00 | Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf) |
| pvap | 1860.00 | kPa | 345.00 | Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf) |
| pvap | 1860.00 | kPa | 345.00 | Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf) |
| pvap | 2066.60 | kPa | 350.00 | Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf) |
| pvap | 2290.30 | kPa | 355.00 | Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf) |

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| pvap | 2532.60 | kPa | 360.00 | Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf) |
| pvap | 2532.40 | kPa | 360.00 | Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf) |
| pvap | 2794.90 | kPa | 365.00 | Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf) |
| pvap | 3080.00 | kPa | 370.00 | Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf) |
| pvap | 3262.70 | kPa | 373.00 | Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf) |
| pvap | 3390.00 | kPa | 375.00 | Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf) |
| pvap | 3390.00 | kPa | 375.00 | Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf) |
| pvap | 3518.30 | kPa | 376.93 | Measurements of Saturation Pressures for Trifluoroethene (R1123) and 3,3,3-Trifluoropropene (R1243zf) |

Datasets

Mass density, kg/m3

| Temperature, K - Gas | Pressure, kPa - Gas | Mass density, kg/m3 - Gas |
|----------------------|---------------------|---------------------------|
| 330.00 | 1111.50 | 50.0 |
| 340.00 | 1167.60 | 49.9 |
| 350.00 | 1222.40 | 49.9 |
| 360.00 | 1276.20 | 49.9 |
| 370.00 | 1329.20 | 49.9 |
| 380.00 | 1381.90 | 49.9 |
| 390.00 | 1433.60 | 49.9 |
| 400.00 | 1484.40 | 49.8 |
| 410.00 | 1534.90 | 49.8 |
| 420.00 | 1584.70 | 49.7 |
| 430.00 | 1633.50 | 49.7 |
| 355.00 | 2036.40 | 99.8 |
| 360.00 | 2101.20 | 99.8 |
| 370.00 | 2227.80 | 99.8 |
| 380.00 | 2351.30 | 99.8 |
| 390.00 | 2472.50 | 99.7 |
| 400.00 | 2591.10 | 99.7 |
| 410.00 | 2708.00 | 99.6 |
| 420.00 | 2823.00 | 99.5 |
| 430.00 | 2936.00 | 99.3 |
| 380.00 | 3350.90 | 199.9 |
| 385.00 | 3499.40 | 199.9 |
| 390.00 | 3645.50 | 199.8 |
| 395.00 | 3789.80 | 199.8 |
| 400.00 | 3931.90 | 199.7 |
| 405.00 | 4073.00 | 199.7 |
| 410.00 | 4212.50 | 199.6 |
| 415.00 | 4350.80 | 199.5 |
| 420.00 | 4487.80 | 199.4 |
| 425.00 | 4623.80 | 199.2 |
| 430.00 | 4758.70 | 199.1 |
| 379.00 | 3659.30 | 408.6 |
| 380.00 | 3727.70 | 408.6 |
| 385.00 | 4070.40 | 408.5 |
| 390.00 | 4415.70 | 408.4 |

| | | |
|--------|---------|-------|
| 395.00 | 4762.20 | 408.3 |
| 400.00 | 5109.30 | 408.2 |
| 405.00 | 5458.70 | 408.1 |
| 410.00 | 5806.10 | 407.9 |
| 415.00 | 6157.70 | 407.7 |
| 420.00 | 6507.10 | 407.5 |
| 425.00 | 6857.20 | 407.2 |

Reference

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Legend

| | |
|-----------------|---|
| chg: | Standard gas enthalpy of combustion |
| cpg: | Ideal gas heat capacity |
| gf: | Standard Gibbs free energy of formation |
| hf: | Enthalpy of formation at standard conditions |
| hfus: | Enthalpy of fusion at standard conditions |
| hvap: | Enthalpy of vaporization at standard conditions |
| ie: | Ionization energy |
| log10ws: | Log10 of Water solubility in mol/l |
| logp: | Octanol/Water partition coefficient |
| mcvol: | McGowan's characteristic volume |
| pc: | Critical Pressure |
| vpap: | Vapor pressure |

| | |
|----------------|----------------------------------|
| rhog: | Gas Density |
| rinpol: | Non-polar retention indices |
| tb: | Normal Boiling Point Temperature |
| tc: | Critical Temperature |
| tf: | Normal melting (fusion) point |
| vc: | Critical Volume |

Latest version available from:

<https://www.chemeo.com/cid/37-893-0/3-3-3-Trifluoropropene.pdf>

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