# Tetrachloroethylene

**Other names:**

1,1,2,2-Tetrachloroethene
1,1,2,2-Tetrachloroethylene
Ankilostin
Antisal 1
Antisol 1
C2Cl4
Carbon bichloride
Carbon dichloride
Czterochloroetylen
Didakene
Dilatin PT
Dow-per
ENT 1,860
ETHYLENE TETRACHLORIDE
Ethene, tetrachloro-
Ethylene, tetrachloro-
F 1110
Fedal-Un
Freon 1110
NCI-C04580
Nema
Nema, veterinary
PERC
PERK
PerSec
Perawin
Perchloorethyleen, per
Perchlor
Perchloraethylen, per
Perchlorethylene
Perchlorethylene, per
Perchloroethene
Perchloroethylene
Perclene
Perclene D
Perclene TG
Percloroetilene
Percosolve
Perklone
RCRA Waste Number U210

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|---|---|
| | TETLEN |
| | TETRACHLOROETHENE |
| | Tetracap |
| | Tetrachlooretheen |
| | Tetrachloraethen |
| | Tetrachlorethylene |
| | Tetracloroetene |
| | Tetraguer |
| | Tetraleno |
| | Tetralex |
| | Tetravec |
| | Tetroguer |
| | Tetropil |
| | UN 1897 |
| **Inchi:** | InChI=1S/C2Cl4/c3-1(4)2(5)6 |
| **InchiKey:** | CYTYCFOTNPOANT-UHFFFAOYSA-N |
| **Formula:** | C2Cl4 |
| **SMILES:** | ClC(Cl)=C(Cl)Cl |
| **Mol. weight [g/mol]:** | 165.83 |
| **CAS:** | 127-18-4 |

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| chl | -830.00 ± 10.00 | kJ/mol | NIST Webbook |
| dm | 0.00 | debye | KDB |
| dvisc | 0.0008900 | Pa×s | Studies on Transport and Thermodynamic Properties of Binary Mixtures of Hexan-1-ol with Halogenated Compounds at 293.15 K |
| dvisc | 0.0008474 | Pa×s | Densities and Viscosities of Binary Liquid Mixtures of Trichloroethylene and Tetrachloroethylene with Some Polar and Nonpolar Solvents |
| ea | 0.64 ± 0.03 | eV | NIST Webbook |
| ea | 0.50 | eV | NIST Webbook |
| gf | 22.61 | kJ/mol | KDB |
| hf | -15.00 | kJ/mol | NIST Webbook |
| hf | -12.14 | kJ/mol | KDB |
| hf | -24.00 ± 4.00 | kJ/mol | NIST Webbook |

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|---|---|---|---|
| hfl | -54.40 | kJ/mol | NIST Webbook |
| hfl | -64.00 ± 4.00 | kJ/mol | NIST Webbook |
| hfus | 15.31 | kJ/mol | Joback Method |
| hvap | 39.70 ± 0.84 | kJ/mol | NIST Webbook |
| hvap | 39.70 ± 0.10 | kJ/mol | NIST Webbook |
| hvap | 39.72 ± 0.05 | kJ/mol | NIST Webbook |
| hvap | 39.72 | kJ/mol | NIST Webbook |
| ie | 9.32 | eV | NIST Webbook |
| ie | 9.33 ± 0.00 | eV | NIST Webbook |
| ie | 9.32 ± 0.01 | eV | NIST Webbook |
| ie | 9.50 | eV | NIST Webbook |
| ie | 9.34 | eV | NIST Webbook |
| ie | 9.33 ± 0.00 | eV | NIST Webbook |
| ie | 9.51 | eV | NIST Webbook |
| log10ws | -2.60 | | Aqueous Solubility Prediction Method |
| log10ws | -2.54 | | Estimated Solubility Method |
| logp | 3.068 | | Crippen Method |
| mcvol | 83.700 | ml/mol | McGowan Method |
| pc | 4760.00 | kPa | KDB |
| rinpol | 811.00 | | NIST Webbook |
| rinpol | 789.00 | | NIST Webbook |
| rinpol | 797.00 | | NIST Webbook |
| rinpol | 789.00 | | NIST Webbook |
| rinpol | 796.00 | | NIST Webbook |
| rinpol | 800.00 | | NIST Webbook |
| rinpol | 814.00 | | NIST Webbook |
| rinpol | 816.00 | | NIST Webbook |
| rinpol | 797.00 | | NIST Webbook |
| rinpol | 811.00 | | NIST Webbook |
| rinpol | 793.00 | | NIST Webbook |
| rinpol | 793.00 | | NIST Webbook |
| rinpol | 802.00 | | NIST Webbook |
| rinpol | 819.00 | | NIST Webbook |
| rinpol | 806.00 | | NIST Webbook |
| rinpol | 803.00 | | NIST Webbook |
| rinpol | 832.30 | | NIST Webbook |
| rinpol | 794.00 | | NIST Webbook |
| rinpol | 794.51 | | NIST Webbook |
| rinpol | 806.00 | | NIST Webbook |
| rinpol | 815.00 | | NIST Webbook |
| rinpol | 808.00 | | NIST Webbook |
| rinpol | 814.00 | | NIST Webbook |
| rinpol | 808.00 | | NIST Webbook |

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|---|---|---|
| rinpol | 794.00 | NIST Webbook |
| rinpol | 794.00 | NIST Webbook |
| rinpol | 793.00 | NIST Webbook |
| rinpol | 785.00 | NIST Webbook |
| rinpol | 796.00 | NIST Webbook |
| rinpol | 806.00 | NIST Webbook |
| rinpol | 825.59 | NIST Webbook |
| rinpol | 823.00 | NIST Webbook |
| rinpol | 803.00 | NIST Webbook |
| rinpol | 799.00 | NIST Webbook |
| rinpol | 801.00 | NIST Webbook |
| rinpol | 809.00 | NIST Webbook |
| rinpol | 814.00 | NIST Webbook |
| rinpol | 804.00 | NIST Webbook |
| rinpol | 806.00 | NIST Webbook |
| rinpol | 825.00 | NIST Webbook |
| rinpol | 814.00 | NIST Webbook |
| rinpol | 801.00 | NIST Webbook |
| rinpol | 815.45 | NIST Webbook |
| rinpol | 817.10 | NIST Webbook |
| rinpol | 815.90 | NIST Webbook |
| rinpol | 794.80 | NIST Webbook |
| rinpol | 823.00 | NIST Webbook |
| rinpol | 804.00 | NIST Webbook |
| rinpol | 804.00 | NIST Webbook |
| rinpol | 815.00 | NIST Webbook |
| rinpol | 796.00 | NIST Webbook |
| rinpol | 801.00 | NIST Webbook |
| rinpol | 806.00 | NIST Webbook |
| rinpol | 814.00 | NIST Webbook |
| rinpol | 807.00 | NIST Webbook |
| rinpol | 796.52 | NIST Webbook |
| rinpol | 809.30 | NIST Webbook |
| rinpol | 785.00 | NIST Webbook |
| ripol | 1021.00 | NIST Webbook |
| ripol | 1044.00 | NIST Webbook |
| ripol | 1024.00 | NIST Webbook |
| ripol | 1021.00 | NIST Webbook |
| ripol | 1018.00 | NIST Webbook |
| ripol | 1012.00 | NIST Webbook |
| ripol | 1012.00 | NIST Webbook |
| ripol | 1045.00 | NIST Webbook |
| ripol | 1030.00 | NIST Webbook |
| ripol | 1022.00 | NIST Webbook |

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|---|---|---|---|
| ripol | 1022.00 | | NIST Webbook |
| ripol | 1024.00 | | NIST Webbook |
| ripol | 1030.00 | | NIST Webbook |
| ripol | 1036.20 | | NIST Webbook |
| ripol | 1059.96 | | NIST Webbook |
| ripol | 1050.23 | | NIST Webbook |
| ripol | 1044.00 | | NIST Webbook |
| ripol | 1038.00 | | NIST Webbook |
| ripol | 1026.00 | | NIST Webbook |
| sl | 240.60 | J/mol×K | NIST Webbook |
| tb | 394.45 | K | Excess volumes and speeds of sound of mixtures of 1,2-dibromoethane with chlorinated ethanes and ethenes at 303.15 K |
| tb | 394.15 | K | Excess molar enthalpies of dimethylsulfoxide with chloroethanes and chloroethenes at 298.15K |
| tb | 394.15 | K | Vapor-Liquid Equilibria and Excess Molar Enthalpies for N-Methyl-2-pyrrolidone with Chloroethanes and Chloroethenes |
| tb | 394.15 | K | Isobaric Vapor Liquid Equilibrium for Dimethylsulfoxide with Chloroethanes and Chloroethenes |
| tb | 394.40 | K | KDB |
| tc | 620.00 | K | NIST Webbook |
| tc | 620.20 | K | KDB |
| tf | 250.80 | K | KDB |
| tf | 251.00 | K | Aqueous Solubility Prediction Method |
| tf | 250.97 ± 0.05 | K | NIST Webbook |
| tf | 250.60 ± 0.60 | K | NIST Webbook |
| tt | 250.81 ± 0.02 | K | NIST Webbook |
| vc | 0.326 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 112.54 | J/mol×K | 583.45 | Joback Method |
| cpg | 114.10 | J/mol×K | 620.38 | Joback Method |

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|---|---|---|---|---|
| cpg | 103.82 | J/mol×K | 435.73 | Joback Method |
| cpg | 106.43 | J/mol×K | 472.66 | Joback Method |
| cpg | 108.74 | J/mol×K | 509.59 | Joback Method |
| cpg | 110.77 | J/mol×K | 546.52 | Joback Method |
| cpg | 100.86 | J/mol×K | 398.80 | Joback Method |
| cpl | 157.90 | J/mol×K | 298.15 | NIST Webbook |
| cpl | 146.50 | J/mol×K | 298.15 | NIST Webbook |
| cpl | 146.90 | J/mol×K | 298.00 | NIST Webbook |
| cpl | 139.70 | J/mol×K | 298.00 | NIST Webbook |
| cpl | 147.16 | J/mol×K | 298.15 | NIST Webbook |
| hfust | 0.82 | kJ/mol | 210.00 | NIST Webbook |
| hfust | 10.88 | kJ/mol | 250.80 | NIST Webbook |
| hfust | 10.88 | kJ/mol | 250.81 | NIST Webbook |
| hfust | 10.88 | kJ/mol | 250.80 | NIST Webbook |
| hvapt | 34.68 | kJ/mol | 394.10 | NIST Webbook |
| hvapt | 38.40 | kJ/mol | 350.00 | NIST Webbook |
| hvapt | 38.70 | kJ/mol | 351.50 | NIST Webbook |
| hvapt | 34.73 | kJ/mol | 394.20 | KDB |
| hvapt | 38.90 | kJ/mol | 340.00 | NIST Webbook |
| hvapt | 37.60 | kJ/mol | 353.00 | NIST Webbook |
| pvap | 3.21 | kPa | 303.15 | Isothermal (vapour + liquid) equilibrium for binary mixtures of (tetrahydrofuran + 1,1,2,2-tetrachloroethane or tetrachloroethene) at nine temperatures |
| pvap | 6.62 | kPa | 318.15 | Total vapour pressure and excess Gibbs energy for binary mixtures of 1,1,2,2-tetrachloroethane or tetrachloroethene with tetrachloromethane at nine temperatures |

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|---|---|---|---|---|
| pvap | 8.29 | kPa | 323.15 | Total vapour pressure and excess Gibbs energy for binary mixtures of 1,1,2,2-tetrachloroethane or tetrachloroethene with tetrachloromethane at nine temperatures |
| pvap | 4.12 | kPa | 308.15 | Total vapour pressure and excess Gibbs energy for binary mixtures of 1,1,2,2-tetrachloroethane or tetrachloroethene with tetrachloromethane at nine temperatures |
| pvap | 1.40 | kPa | 288.15 | Isothermal (vapour + liquid) equilibrium for binary mixtures of (tetrahydrofuran + 1,1,2,2-tetrachloroethane or tetrachloroethene) at nine temperatures |
| pvap | 1.86 | kPa | 293.15 | Isothermal (vapour + liquid) equilibrium for binary mixtures of (tetrahydrofuran + 1,1,2,2-tetrachloroethane or tetrachloroethene) at nine temperatures |
| pvap | 2.46 | kPa | 298.15 | Isothermal (vapour + liquid) equilibrium for binary mixtures of (tetrahydrofuran + 1,1,2,2-tetrachloroethane or tetrachloroethene) at nine temperatures |

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|---|---|---|---|---|
| pvap | 4.12 | kPa | 308.15 | Isothermal (vapour + liquid) equilibrium for binary mixtures of (tetrahydrofuran + 1,1,2,2-tetrachloroethane or tetrachloroethene) at nine temperatures |
| pvap | 5.25 | kPa | 313.15 | Total vapour pressure and excess Gibbs energy for binary mixtures of 1,1,2,2-tetrachloroethane or tetrachloroethene with tetrachloromethane at nine temperatures |
| pvap | 3.21 | kPa | 303.15 | Total vapour pressure and excess Gibbs energy for binary mixtures of 1,1,2,2-tetrachloroethane or tetrachloroethene with tetrachloromethane at nine temperatures |
| pvap | 2.46 | kPa | 298.15 | Total vapour pressure and excess Gibbs energy for binary mixtures of 1,1,2,2-tetrachloroethane or tetrachloroethene with tetrachloromethane at nine temperatures |
| pvap | 1.86 | kPa | 293.15 | Total vapour pressure and excess Gibbs energy for binary mixtures of 1,1,2,2-tetrachloroethane or tetrachloroethene with tetrachloromethane at nine temperatures |

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|---|---|---|---|---|
| pvap | 5.25 | kPa | 313.15 | Isothermal (vapour + liquid) equilibrium for binary mixtures of (tetrahydrofuran + 1,1,2,2-tetrachloroethane or tetrachloroethene) at nine temperatures |
| pvap | 1.02 | kPa | 283.15 | Total vapour pressure and excess Gibbs energy for binary mixtures of 1,1,2,2-tetrachloroethane or tetrachloroethene with tetrachloromethane at nine temperatures |
| pvap | 6.62 | kPa | 318.15 | Isothermal (vapour + liquid) equilibrium for binary mixtures of (tetrahydrofuran + 1,1,2,2-tetrachloroethane or tetrachloroethene) at nine temperatures |
| pvap | 8.29 | kPa | 323.15 | Isothermal (vapour + liquid) equilibrium for binary mixtures of (tetrahydrofuran + 1,1,2,2-tetrachloroethane or tetrachloroethene) at nine temperatures |
| pvap | 1.02 | kPa | 283.15 | Total vapour pressure and excess Gibbs energy for binary mixtures of 1,1,2,2-tetrachlorethane or tetrachloroethene with benzene at nine temperatures |

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|---|---|---|---|---|
| pvap | 1.40 | kPa | 288.15 | Total vapour pressure and excess Gibbs energy for binary mixtures of 1,1,2,2-tetrachlorethane or tetrachloroethene with benzene at nine temperatures |
| pvap | 1.86 | kPa | 293.15 | Total vapour pressure and excess Gibbs energy for binary mixtures of 1,1,2,2-tetrachlorethane or tetrachloroethene with benzene at nine temperatures |
| pvap | 1.40 | kPa | 288.15 | Total vapour pressure and excess Gibbs energy for binary mixtures of 1,1,2,2-tetrachloroethane or tetrachloroethene with tetrachloromethane at nine temperatures |
| pvap | 3.21 | kPa | 303.15 | Total vapour pressure and excess Gibbs energy for binary mixtures of 1,1,2,2-tetrachlorethane or tetrachloroethene with benzene at nine temperatures |
| pvap | 4.12 | kPa | 308.15 | Total vapour pressure and excess Gibbs energy for binary mixtures of 1,1,2,2-tetrachlorethane or tetrachloroethene with benzene at nine temperatures |

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|---|---|---|---|---|
| pvap | 5.25 | kPa | 313.15 | Total vapour pressure and excess Gibbs energy for binary mixtures of 1,1,2,2-tetrachlorethane or tetrachloroethene with benzene at nine temperatures |
| pvap | 6.62 | kPa | 318.15 | Total vapour pressure and excess Gibbs energy for binary mixtures of 1,1,2,2-tetrachlorethane or tetrachloroethene with benzene at nine temperatures |
| pvap | 8.29 | kPa | 323.15 | Total vapour pressure and excess Gibbs energy for binary mixtures of 1,1,2,2-tetrachlorethane or tetrachloroethene with benzene at nine temperatures |
| pvap | 2.46 | kPa | 298.15 | Total vapour pressure and excess Gibbs energy for binary mixtures of 1,1,2,2-tetrachlorethane or tetrachloroethene with benzene at nine temperatures |
| pvap | 1.02 | kPa | 283.15 | Isothermal (vapour + liquid) equilibrium for binary mixtures of (tetrahydrofuran + 1,1,2,2-tetrachloroethane or tetrachloroethene) at nine temperatures |

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|---|---|---|---|
| rfi | 1.50500 | 298.15 | Bubble Temperature Measurements on the Binary Mixtures of n-Heptane or Nitrobenzene or Chlorobenzene with Some Chloroethanes and Chloroethylenes at (94.6 to 95.8) kPa |
| rfi | 1.50500 | 293.15 | Bubble points of some binary mixtures formed by o-cresol at 95.75 kPa |
| rfi | 1.50580 | 293.15 | Excess Gibbs energies of selected binary mixtures formed by N,N-dimethyl formamide at 95.5 kPa |
| rfi | 1.50580 | 293.15 | Vapor-Liquid Equilibria of Binary Mixtures Formed by Hexan-1-ol with Chloroethanes and Chloroethenes at 95.6 kPa |
| rfi | 1.49800 | 308.15 | Density, Viscosity, Refractive Index, and Speed of Sound for Binary Mixtures of Anisole with 2-Chloroethanol, 1,4-Dioxane, Tetrachloroethylene, Tetrachloroethane, DMF, DMSO, and Diethyl Oxalate at (298.15, 303.15, and 308.15) K |

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|---|---|---|---|
| rfi | 1.50100 | 303.15 | Density, Viscosity, Refractive Index, and Speed of Sound for Binary Mixtures of Anisole with 2-Chloroethanol, 1,4-Dioxane, Tetrachloroethylene, Tetrachloroethane, DMF, DMSO, and Diethyl Oxalate at (298.15, 303.15, and 308.15) K |
| rfi | 1.50360 | 298.15 | Density, Viscosity, Refractive Index, and Speed of Sound for Binary Mixtures of Anisole with 2-Chloroethanol, 1,4-Dioxane, Tetrachloroethylene, Tetrachloroethane, DMF, DMSO, and Diethyl Oxalate at (298.15, 303.15, and 308.15) K |
| rfi | 1.50500 | 298.15 | Bubble points of the binary mixtures formed by ethylbenzene with some chloroaliphatics and substituted benzenes at p = 94.7 kPa |
| rfi | 1.49780 | 308.15 | Density, Viscosity, Refractive Index, and Speed of Sound in the Binary Mixtures of Tri-n-butylamine + Triethylamine, + Tetrahydrofuran, + Tetradecane, + Tetrachloroethylene, + Pyridine, or + Trichloroethylene at (298.15, 303.15, and 308.15) K |

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|---|---|---|---|
| rfi | 1.50050 | 303.15 | Density, Viscosity, Refractive Index, and Speed of Sound in the Binary Mixtures of Tri-n-butylamine + Triethylamine, + Tetrahydrofuran, + Tetradecane, + Tetrachloroethylene, + Pyridine, or + Trichloroethylene at (298.15, 303.15, and 308.15) K |
| rfi | 1.50360 | 298.15 | Density, Viscosity, Refractive Index, and Speed of Sound in the Binary Mixtures of Tri-n-butylamine + Triethylamine, + Tetrahydrofuran, + Tetradecane, + Tetrachloroethylene, + Pyridine, or + Trichloroethylene at (298.15, 303.15, and 308.15) K |
| rfi | 1.50500 | 293.15 | Activity coefficients and excess Gibbs free energy of some binary mixtures formed by p-cresol at 95.23 kPa |
| rfi | 1.50320 | 298.15 | Bubble-Temperature Measurements on Some Binary Mixtures Formed by Tetrahydrofuran or Amyl Alcohol with Hydrocarbons, Chlorohydrocarbons, or Butanols at (94.6 or 95.8) kPa |

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|---|---|---|---|---|
| rhol | 1590.60 | kg/m3 | 313.15 | Excess Molar Volumes and Sound Speed in (Phenylacetonitrile + 1,2-Dichloroethane), (Phenylacetonitrile + 1,1,2-Trichloroethane), (Phenylacetonitrile + 1,1,2,2-Tetrachloroethane), (Phenylacetonitrile + Trichloroethene), and (Phenylacetonitrile + Tetrachloroethene) at Temperatures of (303.15, 308.15, and 313.15) K |
| rhol | 1620.00 | kg/m3 | 293.00 | KDB |
| rhol | 1614.49 | kg/m3 | 298.15 | Excess molar volumes, viscosities, and speeds of sound of the ternary mixture {1-heptanol (1) + trichloroethylene (2) + methylcyclohexane (3)} at T = 298.15 K |
| rhol | 1622.39 | kg/m3 | 293.15 | Thermophysical and sonochemical behaviour of binary mixtures of decan-1-ol with halohydrocarbons at (T = 293.15 and 313.15) K |

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|---|---|---|---|---|
| rhol | 1607.20 | kg/m3 | 303.15 | Excess Molar Volumes and Sound Speed in (Phenylacetonitrile + 1,2-Dichloroethane), (Phenylacetonitrile + 1,1,2-Trichloroethane), (Phenylacetonitrile + 1,1,2,2-Tetrachloroethane), (Phenylacetonitrile + Trichloroethene), and (Phenylacetonitrile + Tetrachloroethene) at Temperatures of (303.15, 308.15, and 313.15) K |
| rhol | 1597.90 | kg/m3 | 308.15 | Excess Molar Volumes and Sound Speed in (Phenylacetonitrile + 1,2-Dichloroethane), (Phenylacetonitrile + 1,1,2-Trichloroethane), (Phenylacetonitrile + 1,1,2,2-Tetrachloroethane), (Phenylacetonitrile + Trichloroethene), and (Phenylacetonitrile + Tetrachloroethene) at Temperatures of (303.15, 308.15, and 313.15) K |

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|---|---|---|---|---|
| rhol | 1614.80 | kg/m3 | 298.15 | Excess Molar Volumes and Sound Speed in (Phenylacetonitrile + 1,2-Dichloroethane), (Phenylacetonitrile + 1,1,2-Trichloroethane), (Phenylacetonitrile + 1,1,2,2-Tetrachloroethane), (Phenylacetonitrile + Trichloroethene), and (Phenylacetonitrile + Tetrachloroethene) at Temperatures of (303.15, 308.15, and 313.15) K |
| sfust | 3.90 | J/mol×K | 210.00 | NIST Webbook |
| sfust | 43.38 | J/mol×K | 250.81 | NIST Webbook |
| sfust | 43.38 | J/mol×K | 250.80 | NIST Webbook |
| speedsl | 1038.97 | m/s | 298.15 | Densities, Excess Molar Volumes, Ultrasonic Speeds, and Isentropic Compressibilities of Hexan-1-ol with 1,2-Dichloroethane, 1,2-Dibromoethane, and 1,1,2,2-Tetrachloroethene at (293.15 and 298.15) K |
| speedsl | 1054.03 | m/s | 293.15 | Densities, Excess Molar Volumes, Ultrasonic Speeds, and Isentropic Compressibilities of Hexan-1-ol with 1,2-Dichloroethane, 1,2-Dibromoethane, and 1,1,2,2-Tetrachloroethene at (293.15 and 298.15) K |
| srf | 0.03 | N/m | 293.20 | KDB |

# Correlations

| Information | Value |
|---|---|
| Property code | pvap |
| Equation | ln(Pvp) = A + B/(T + C) |
| Coeff. A | 1.42797e+01 |
| Coeff. B | -3.36251e+03 |
| Coeff. C | -4.61640e+01 |
| Temperature range (K), min. | 286.48 |
| Temperature range (K), max. | 421.37 |

| Information | Value |
|---|---|
| Property code | pvap |
| Equation | ln(Pvp) = A + B/T + C*ln(T) + D*T^2 |
| Coeff. A | 6.04740e+01 |
| Coeff. B | -6.53097e+03 |
| Coeff. C | -6.66587e+00 |
| Coeff. D | 3.52238e-06 |
| Temperature range (K), min. | 250.80 |
| Temperature range (K), max. | 620.00 |

# Datasets

## Viscosity, Pa*s

| Temperature, K - Liquid | Pressure, kPa - Liquid | Viscosity, Pa*s - Liquid |
|---|---|---|
| 308.15 | 101.00 | 0.0007230 |

Reference *https://www.doi.org/10.1016/j.jct.2006.06.009*

# Sources

**Densities, Excess Molar Volumes, Ultrasonic Speeds, and Isentropic Compressibilities of Hexan-1-ol with 1,2-Dichloroethane, 1,2-Dibromoethane, and 1,1,2,2-Tetrachloroethene at (293.15 and 298.15) K:** https://www.doi.org/10.1007/s10765-010-0874-x

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|---|---|
| **Density, Viscosity, Refractive Index, and Speed of Sound for Binary Mixtures of Anisole With** | https://www.doi.org/10.1021/je049610v |
| **Total vapour pressure and excess Gibbs energy for binary mixtures of** | https://www.doi.org/10.1016/j.fluid.2004.02.021 |
| **KDB Vapor Pressure Data:** | https://www.cheric.org/research/kdb/hcprop/showprop.php?cmpid=1714 |
| **Isobaric Vapor Liquid Equilibrium for** | https://www.doi.org/10.1021/je700408x |
| **Excess molar volumes and speeds of sound of mixtures of 1,2-dibromoethane with** | https://www.doi.org/10.1016/j.jct.2004.11.013 |
| **Bubble Temperature Measurements on Some Binary Mixtures Formed by** | https://www.doi.org/10.1021/je030141r |
| **Excess Molar Volumes and Sound Speeds in (Phenylacetonitrile** | https://www.doi.org/10.1021/je900570e |
| **Bubble points of the binary mixtures formed by ethylbenzene with some** | https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure |
| **Antoine Saturation Pressure Calculation Method:** | https://www.doi.org/10.1016/j.jct.2005.12.009 |
| **(Phenylacetonitrile + Trichloroethene), at p = 94.7 kPa:** | http://onschallenge.wikispaces.com/file/view/AqueousDataset002.xlsx/351826032/AqueousDa |
| **NIST:** | https://www.cheric.org/files/research/kdb/mol/mol1714.mol |
| **Tetrachloroethene) at Temperatures of (303.15, 308.15, and 313.15) K** | https://www.doi.org/10.1021/je0301085 |
| **Bubble Temperature Measurements on the Binary Mixtures of n-Heptane or** | https://www.doi.org/10.1021/je030147g |
| **Density, Viscosity, Refractive Index, and Speed of Sound in the Binary** | https://www.doi.org/10.1016/j.jct.2005.06.003 |
| **Isothermal (vapour + liquid) equilibrium for binary mixtures of tetrahydrofuran** | https://www.doi.org/10.1016/j.tca.2007.08.008 |
| **Excess molar enthalpies of** | https://www.doi.org/10.1016/j.jct.2006.12.017 |
| **Excess Gibbs free energy of some binary mixtures** | https://www.doi.org/10.1021/je3010535 |
| **Determination of Henry's Law Constants Using Internal Standards** | https://en.wikipedia.org/wiki/Joback_method |
| **Vapor-Liquid Equilibria of Binary Mixtures Formed by Hexan-1-ol with** | https://www.doi.org/10.1021/je9000608 |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **Thermophysical and sonochemical behaviour of binary mixtures of** | https://www.doi.org/10.1016/j.jct.2009.07.020 |
| **Densities and Viscosities of Binary** | https://www.doi.org/10.1021/je034203p |
| **KDB Pure Component Thermophysical Properties Databank:** | https://www.cheric.org/research/kdb/hcprop/showprop.php?cmpid=1714 |
| **Excess Gibbs energies of selected binary mixtures formed by** | https://www.doi.org/10.1016/j.fluid.2006.08.018 |
| **Bubble points of some binary mixtures formed by o-cresol at 95.75 kPa:** | https://www.doi.org/10.1016/j.fluid.2005.09.012 |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C127184&Units=SI |
| **Relation between characteristic molecular volume and hydrophobicity of nonpolar molecules:** | https://www.doi.org/10.1016/j.jct.2010.04.011 |
| **Vapor-Liquid Equilibria and Excess Molar Enthalpies for** | https://www.doi.org/10.1021/je020065c |
| **Studies on Transport and Thermodynamic Properties of Binary** | https://www.doi.org/10.1021/je900278v |
| **Densities and viscosities of binary liquid mixtures of 1-methylnaphthalene** | https://www.doi.org/10.1016/j.jct.2006.06.009 |
| **Excess molar volumes, viscosities, and speeds of sound of ternary mixture** | https://www.doi.org/10.1016/j.jct.2006.07.015 |
| **(1) Thermodynamic properties of Gibbs energy for binary mixtures of** | https://www.doi.org/10.1016/j.fluid.2004.10.025 |
| **Estimated Solubility Method:** | http://pubs.acs.org/doi/suppl/10.1021/ci034243x/suppl_file/ci034243xsi20040112_053635.txt |

# Legend

| | |
|---|---|
| **chl:** | Standard liquid enthalpy of combustion |
| **cpg:** | Ideal gas heat capacity |
| **cpl:** | Liquid phase heat capacity |
| **dm:** | Dipole Moment |

| | |
|---|---|
| **dvisc:** | Dynamic viscosity |
| **ea:** | Electron affinity |
| **gf:** | Standard Gibbs free energy of formation |
| **hf:** | Enthalpy of formation at standard conditions |
| **hfl:** | Liquid phase enthalpy of formation at standard conditions |
| **hfus:** | Enthalpy of fusion at standard conditions |
| **hfust:** | Enthalpy of fusion at a given temperature |
| **hvap:** | Enthalpy of vaporization at standard conditions |
| **hvapt:** | Enthalpy of vaporization at a given temperature |
| **ie:** | Ionization energy |
| **log10ws:** | Log10 of Water solubility in mol/l |
| **logp:** | Octanol/Water partition coefficient |
| **mcvol:** | McGowan's characteristic volume |
| **pc:** | Critical Pressure |
| **pvap:** | Vapor pressure |
| **rfi:** | Refractive Index |
| **rhol:** | Liquid Density |
| **rinpol:** | Non-polar retention indices |
| **ripol:** | Polar retention indices |
| **sfust:** | Entropy of fusion at a given temperature |
| **sl:** | Liquid phase molar entropy at standard conditions |
| **speedsl:** | Speed of sound in fluid |
| **srf:** | Surface Tension |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **tt:** | Triple Point Temperature |
| **vc:** | Critical Volume |