

2-methyl-4-heptene

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|-----------------------------|---|
| Inchi: | InChI=1S/C8H16/c1-4-5-6-7-8(2)3/h5-6,8H,4,7H2,1-3H3 |
| InchiKey: | PMPISKBGRHSPEE-UHFFFAOYSA-N |
| Formula: | C8H16 |
| SMILES: | CCC=CCC(C)C |
| Mol. weight [g/mol]: | 112.21 |
| CAS: | 3404-57-7 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------------|----------------------|----------------|
| gf | 94.26 | kJ/mol | Joback Method |
| hf | -96.51 | kJ/mol | Joback Method |
| hfus | 13.15 | kJ/mol | Joback Method |
| hvap | 32.97 | kJ/mol | Joback Method |
| log10ws | -2.78 | | Crippen Method |
| logp | 2.999 | | Crippen Method |
| mvol | 119.280 | ml/mol | McGowan Method |
| pc | 2695.80 | kPa | Joback Method |
| tb | 404.00 ± 4.00 | K | NIST Webbook |
| tb | 385.15 ± 2.00 | K | NIST Webbook |
| tc | 562.05 | K | Joback Method |
| tf | 159.84 | K | Joback Method |
| vc | 0.458 | m ³ /kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|-----------|---------|-----------------|---------------|
| cpg | 217.94 | J/mol×K | 386.16 | Joback Method |
| cpg | 231.23 | J/mol×K | 415.47 | Joback Method |
| cpg | 243.94 | J/mol×K | 444.79 | Joback Method |
| cpg | 256.10 | J/mol×K | 474.10 | Joback Method |
| cpg | 267.72 | J/mol×K | 503.42 | Joback Method |
| cpg | 278.83 | J/mol×K | 532.73 | Joback Method |
| cpg | 289.43 | J/mol×K | 562.05 | Joback Method |
| dvisc | 0.0101457 | Paxs | 159.84 | Joback Method |

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|-------|-----------|------|--------|---------------|
| dvisc | 0.0028001 | Paxs | 197.56 | Joback Method |
| dvisc | 0.0011677 | Paxs | 235.28 | Joback Method |
| dvisc | 0.0006201 | Paxs | 273.00 | Joback Method |
| dvisc | 0.0003840 | Paxs | 310.72 | Joback Method |
| dvisc | 0.0002638 | Paxs | 348.44 | Joback Method |
| dvisc | 0.0001950 | Paxs | 386.16 | Joback Method |

Sources

| | |
|------------------------|---|
| Crippen Method: | https://www.chemeo.com/doc/models/crippen_log10ws |
| Joback Method: | https://en.wikipedia.org/wiki/Joback_method |
| McGowan Method: | http://link.springer.com/article/10.1007/BF02311772 |
| NIST Webbook: | http://webbook.nist.gov/cgi/cbook.cgi?ID=C3404577&Units=SI |
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci9903071 |

Legend

| | |
|---------------------------------------|---|
| cp_g: | Ideal gas heat capacity |
| dvisc: | Dynamic viscosity |
| g_f: | Standard Gibbs free energy of formation |
| h_f: | Enthalpy of formation at standard conditions |
| h_{fus}: | Enthalpy of fusion at standard conditions |
| h_{vap}: | Enthalpy of vaporization at standard conditions |
| log₁₀w_s: | Log ₁₀ of Water solubility in mol/l |
| log_p: | Octanol/Water partition coefficient |
| mc_{vol}: | McGowan's characteristic volume |
| pc: | Critical Pressure |
| tb: | Normal Boiling Point Temperature |
| tc: | Critical Temperature |
| tf: | Normal melting (fusion) point |
| vc: | Critical Volume |

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