

Tridecane, 7-butyl

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|----------------------|--|
| Inchi: | InChI=1S/C17H36/c1-4-7-10-12-15-17(14-9-6-3)16-13-11-8-5-2/h17H,4-16H2,1-3H3 |
| InchiKey: | QJJFEMPAJMVOWJW-UHFFFAOYSA-N |
| Formula: | C17H36 |
| SMILES: | CCCCCCC(CCCC)CCCCC |
| Mol. weight [g/mol]: | 240.47 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|---------|----------------|
| gf | 89.82 | kJ/mol | Joback Method |
| hf | -399.49 | kJ/mol | Joback Method |
| hfus | 36.26 | kJ/mol | Joback Method |
| hvap | 53.05 | kJ/mol | Joback Method |
| log10ws | -6.70 | | Crippen Method |
| logp | 6.734 | | Crippen Method |
| mcvol | 250.390 | ml/mol | McGowan Method |
| pc | 1238.09 | kPa | Joback Method |
| rinpol | 1580.00 | | NIST Webbook |
| tb | 587.92 | K | Joback Method |
| tc | 748.86 | K | Joback Method |
| tf | 266.35 | K | Joback Method |
| vc | 0.982 | m3/kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|-----------|---------|-----------------|---------------|
| cpg | 667.18 | J/molxK | 587.92 | Joback Method |
| cpg | 759.24 | J/molxK | 722.04 | Joback Method |
| cpg | 742.33 | J/molxK | 695.21 | Joback Method |
| cpg | 724.69 | J/molxK | 668.39 | Joback Method |
| cpg | 706.30 | J/molxK | 641.57 | Joback Method |
| cpg | 687.14 | J/molxK | 614.74 | Joback Method |
| cpg | 775.45 | J/molxK | 748.86 | Joback Method |
| dvisc | 0.0001283 | Paxs | 587.92 | Joback Method |
| dvisc | 0.0001789 | Paxs | 534.33 | Joback Method |

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|-------|-----------|------|--------|---------------|
| dvisc | 0.0002686 | Paxs | 480.73 | Joback Method |
| dvisc | 0.0004468 | Paxs | 427.13 | Joback Method |
| dvisc | 0.0008598 | Paxs | 373.54 | Joback Method |
| dvisc | 0.0020606 | Paxs | 319.94 | Joback Method |
| dvisc | 0.0070198 | Paxs | 266.35 | Joback Method |

Sources

| | |
|------------------------|---|
| NIST Webbook: | http://webbook.nist.gov/cgi/cbook.cgi?ID=R9911&Units=SI |
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci9903071 |
| 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 |

Legend

| | |
|-----------------|---|
| cpg: | Ideal gas heat capacity |
| dvisc: | Dynamic viscosity |
| 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 |
| log10ws: | Log10 of Water solubility in mol/l |
| logp: | Octanol/Water partition coefficient |
| mcvol: | McGowan's characteristic volume |
| pc: | Critical Pressure |
| rinpol: | Non-polar retention indices |
| tb: | Normal Boiling Point Temperature |
| tc: | Critical Temperature |
| tf: | Normal melting (fusion) point |
| vc: | Critical Volume |

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