# Heptafluorobutanamide, N,N-dihexyl-

**Inchi:** InChI=1S/C16H26F7NO/c1-3-5-7-9-11-24(12-10-8-6-4-2)13(25)14(17,18)15(19,20)16(21
**InchiKey:** LRDBYJRSHOQVJO-UHFFFAOYSA-N
**Formula:** C16H26F7NO
**SMILES:** CCCCCCN(CCCCCC)C(=O)C(F)(F)C(F)(F)C(F)(F)F
**Mol. weight [g/mol]:** 381.37

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -1289.45 | kJ/mol | Joback Method |
| hf | -1817.64 | kJ/mol | Joback Method |
| hfus | 41.13 | kJ/mol | Joback Method |
| hvap | 50.39 | kJ/mol | Joback Method |
| log10ws | -6.16 | | Crippen Method |
| logp | 5.809 | | Crippen Method |
| mcvol | 260.240 | ml/mol | McGowan Method |
| pc | 1148.32 | kPa | Joback Method |
| rinpol | 1556.00 | | NIST Webbook |
| rinpol | 1556.00 | | NIST Webbook |
| tb | 616.99 | K | Joback Method |
| tc | 767.28 | K | Joback Method |
| tf | 363.87 | K | Joback Method |
| vc | 1.048 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 748.10 | J/mol×K | 616.99 | Joback Method |
| cpg | 764.43 | J/mol×K | 642.04 | Joback Method |
| cpg | 779.91 | J/mol×K | 667.09 | Joback Method |
| cpg | 794.58 | J/mol×K | 692.13 | Joback Method |
| cpg | 808.49 | J/mol×K | 717.18 | Joback Method |
| cpg | 821.67 | J/mol×K | 742.23 | Joback Method |
| cpg | 834.17 | J/mol×K | 767.28 | Joback Method |

# Sources

| | |
|---|---|
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U308271&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **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 |
| **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 |