# Sarcosine, n-heptafluorobutyryl-, decyl ester

**Inchi:** InChI=1S/C17H26F7NO3/c1-3-4-5-6-7-8-9-10-11-28-13(26)12-25(2)14(27)15(18,19)16(2
**InchiKey:** UYHZRSOKCZWCQL-UHFFFAOYSA-N
**Formula:** C17H26F7NO3
**SMILES:** CCCCCCCCCCOC(=O)CN(C)C(=O)C(F)(F)C(F)(F)C(F)(F)F
**Mol. weight [g/mol]:** 425.38

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -1514.95 | kJ/mol | Joback Method |
| hf | -2083.08 | kJ/mol | Joback Method |
| hfus | 46.51 | kJ/mol | Joback Method |
| hvap | 61.77 | kJ/mol | Joback Method |
| log10ws | -5.44 | | Crippen Method |
| logp | 4.962 | | Crippen Method |
| mcvol | 281.770 | ml/mol | McGowan Method |
| pc | 1110.37 | kPa | Joback Method |
| rinpol | 1863.00 | | NIST Webbook |
| tb | 716.16 | K | Joback Method |
| tc | 880.38 | K | Joback Method |
| tf | 447.30 | K | Joback Method |
| vc | 1.129 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 862.15 | J/mol×K | 716.16 | Joback Method |
| cpg | 877.39 | J/mol×K | 743.53 | Joback Method |
| cpg | 891.76 | J/mol×K | 770.90 | Joback Method |
| cpg | 905.31 | J/mol×K | 798.27 | Joback Method |
| cpg | 918.10 | J/mol×K | 825.64 | Joback Method |
| cpg | 930.17 | J/mol×K | 853.01 | Joback Method |
| cpg | 941.57 | J/mol×K | 880.38 | Joback Method |

# Sources

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|---|---|
| **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=U321262&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |

# Legend

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|---|---|
| **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 |