# Sarcosine, N-(cyclopentylcarbonyl)-, decyl ester

**Inchi:** InChI=1S/C19H35NO3/c1-3-4-5-6-7-8-9-12-15-23-18(21)16-20(2)19(22)17-13-10-11-14-
**InchiKey:** CGPMEVCGHPOJAX-UHFFFAOYSA-N
**Formula:** C19H35NO3
**SMILES:** CCCCCCCCCCOC(=O)CN(C)C(=O)C1CCCC1
**Mol. weight [g/mol]:** 325.49

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -106.41 | kJ/mol | Joback Method |
| hf | -664.86 | kJ/mol | Joback Method |
| hfus | 46.31 | kJ/mol | Joback Method |
| hvap | 76.09 | kJ/mol | Joback Method |
| log10ws | -4.64 | | Crippen Method |
| logp | 4.319 | | Crippen Method |
| mcvol | 286.700 | ml/mol | McGowan Method |
| pc | 1317.52 | kPa | Joback Method |
| rinpol | 2466.00 | | NIST Webbook |
| tb | 792.00 | K | Joback Method |
| tc | 982.49 | K | Joback Method |
| tf | 469.35 | K | Joback Method |
| vc | 1.089 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 913.18 | J/mol×K | 792.00 | Joback Method |
| cpg | 932.05 | J/mol×K | 823.75 | Joback Method |
| cpg | 949.79 | J/mol×K | 855.50 | Joback Method |
| cpg | 966.44 | J/mol×K | 887.25 | Joback Method |
| cpg | 982.05 | J/mol×K | 918.99 | Joback Method |
| cpg | 996.65 | J/mol×K | 950.74 | Joback Method |
| cpg | 1010.29 | J/mol×K | 982.49 | Joback Method |

# Sources

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|---|---|
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U321341&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 |

# 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 |