# Benzenesulfonamide, 4-methyl-N-ethyl-N-pentyl-

**Inchi:** InChI=1S/C14H23NO2S/c1-4-6-7-12-15(5-2)18(16,17)14-10-8-13(3)9-11-14/h8-11H,4-7,

**InchiKey:** FUNQQIFBSVLTMW-UHFFFAOYSA-N

**Formula:** C14H23NO2S

**SMILES:** CCCCCN(CC)S(=O)(=O)c1ccc(C)cc1

**Mol. weight [g/mol]:** 269.40

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -187.98 | kJ/mol | Joback Method |
| hf | -493.05 | kJ/mol | Joback Method |
| hfus | 40.07 | kJ/mol | Joback Method |
| hvap | 70.37 | kJ/mol | Joback Method |
| log10ws | -3.71 | | Crippen Method |
| logp | 3.196 | | Crippen Method |
| mcvol | 222.430 | ml/mol | McGowan Method |
| pc | 2282.77 | kPa | Joback Method |
| rinpol | 2238.00 | | NIST Webbook |
| rinpol | 2238.00 | | NIST Webbook |
| tb | 611.60 | K | Joback Method |
| tc | 799.14 | K | Joback Method |
| tf | 357.51 | K | Joback Method |
| vc | 0.856 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 570.20 | J/mol×K | 611.60 | Joback Method |
| cpg | 587.93 | J/mol×K | 642.86 | Joback Method |
| cpg | 604.68 | J/mol×K | 674.11 | Joback Method |
| cpg | 620.49 | J/mol×K | 705.37 | Joback Method |
| cpg | 635.37 | J/mol×K | 736.63 | Joback Method |
| cpg | 649.34 | J/mol×K | 767.88 | Joback Method |
| cpg | 662.44 | J/mol×K | 799.14 | Joback Method |

# Sources

| | |
|---|---|
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U415275&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 |