

Benzamide, N-(3-methylbutyl)

| | |
|-----------------------------|--|
| Inchi: | InChI=1S/C12H17NO/c1-10(2)8-9-13-12(14)11-6-4-3-5-7-11/h3-7,10H,8-9H2,1-2H3,(H,1 |
| InchiKey: | PMBAZUADXILDHV-UHFFFAOYSA-N |
| Formula: | C12H17NO |
| SMILES: | CC(C)CCNC(=O)c1ccccc1 |
| Mol. weight [g/mol]: | 191.27 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|----------------------|----------------|
| gf | 120.60 | kJ/mol | Joback Method |
| hf | -118.87 | kJ/mol | Joback Method |
| hfus | 24.05 | kJ/mol | Joback Method |
| hvap | 57.38 | kJ/mol | Joback Method |
| log10ws | -3.25 | | Crippen Method |
| logp | 2.462 | | Crippen Method |
| mcvol | 167.730 | ml/mol | McGowan Method |
| pc | 2616.41 | kPa | Joback Method |
| rinpol | 1677.00 | | NIST Webbook |
| rinpol | 1677.00 | | NIST Webbook |
| tb | 604.24 | K | Joback Method |
| tc | 816.64 | K | Joback Method |
| tf | 339.01 | K | Joback Method |
| vc | 0.634 | m ³ /kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|--------|---------|-----------------|---------------|
| cpg | 420.45 | J/mol×K | 604.24 | Joback Method |
| cpg | 436.03 | J/mol×K | 639.64 | Joback Method |
| cpg | 450.64 | J/mol×K | 675.04 | Joback Method |
| cpg | 464.30 | J/mol×K | 710.44 | Joback Method |
| cpg | 477.08 | J/mol×K | 745.84 | Joback Method |
| cpg | 489.00 | J/mol×K | 781.24 | Joback Method |
| cpg | 500.11 | J/mol×K | 816.64 | Joback Method |

Sources

| | |
|------------------------|---|
| McGowan Method: | http://link.springer.com/article/10.1007/BF02311772 |
| NIST Webbook: | http://webbook.nist.gov/cgi/cbook.cgi?ID=R323087&Units=SI |
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci990307I |
| Crippen Method: | https://www.cheméo.com/doc/models/crippen_log10ws |
| Joback Method: | https://en.wikipedia.org/wiki/Joback_method |

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 |
| h vap: | 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 |
| r in pol: | Non-polar retention indices |
| tb: | Normal Boiling Point Temperature |
| tc: | Critical Temperature |
| tf: | Normal melting (fusion) point |
| vc: | Critical Volume |

Latest version available from:

<https://www.cheméo.com/cid/26-120-9/Benzamide-N-3-methylbutyl.pdf>

Generated by Cheméo on 2024-04-26 08:00:53.87477612 +0000 UTC m=+16407702.795353432.

Cheméo (<https://www.cheméo.com>) is the biggest free database of chemical and physical data for the process industry.