

2,4-Difluorobenzoic acid, undecyl ester

Inchi: InChI=1S/C18H26F2O2/c1-2-3-4-5-6-7-8-9-10-13-22-18(21)16-12-11-15(19)14-17(16)20
InchiKey: HEMPVXWEZQMSET-UHFFFAOYSA-N
Formula: C18H26F2O2
SMILES: CCCCCCCCCCOC(=O)c1ccc(F)cc1F
Mol. weight [g/mol]: 312.39

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|----------------------|----------------|
| gf | -429.71 | kJ/mol | Joback Method |
| hf | -838.28 | kJ/mol | Joback Method |
| hfus | 44.59 | kJ/mol | Joback Method |
| hvap | 66.78 | kJ/mol | Joback Method |
| log10ws | -6.56 | | Crippen Method |
| logp | 5.652 | | Crippen Method |
| mvol | 251.700 | ml/mol | McGowan Method |
| pc | 1382.99 | kPa | Joback Method |
| rinpol | 2171.00 | | NIST Webbook |
| rinpol | 2171.00 | | NIST Webbook |
| tb | 722.71 | K | Joback Method |
| tc | 904.96 | K | Joback Method |
| tf | 417.42 | K | Joback Method |
| vc | 0.996 | m ³ /kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|--------|---------|-----------------|---------------|
| cpg | 725.89 | J/mol×K | 722.71 | Joback Method |
| cpg | 742.27 | J/mol×K | 753.09 | Joback Method |
| cpg | 757.78 | J/mol×K | 783.46 | Joback Method |
| cpg | 772.44 | J/mol×K | 813.84 | Joback Method |
| cpg | 786.27 | J/mol×K | 844.21 | Joback Method |
| cpg | 799.30 | J/mol×K | 874.59 | Joback Method |
| cpg | 811.54 | J/mol×K | 904.96 | Joback Method |

Sources

| | |
|------------------------|---|
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci9903071 |
| 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=U338789&Units=SI |

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 |
| hvp: | 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 |
| rinp: | Non-polar retention indices |
| tb: | Normal Boiling Point Temperature |
| tc: | Critical Temperature |
| tf: | Normal melting (fusion) point |
| vc: | Critical Volume |

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