

2,4-Difluorobenzoic acid, isoheptyl ester

| | |
|-----------------------------|---|
| Inchi: | InChI=1S/C13H16F2O2/c1-9(2)4-3-7-17-13(16)11-6-5-10(14)8-12(11)15/h5-6,8-9H,3-4,7 |
| InchiKey: | HQMKNJNCQHNEQZ-UHFFFAOYSA-N |
| Formula: | C13H16F2O2 |
| SMILES: | CC(C)CCCOC(=O)c1ccc(F)cc1F |
| Mol. weight [g/mol]: | 242.26 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|----------------------|----------------|
| gf | -474.25 | kJ/mol | Joback Method |
| hf | -740.36 | kJ/mol | Joback Method |
| hfus | 28.11 | kJ/mol | Joback Method |
| hvap | 55.27 | kJ/mol | Joback Method |
| log10ws | -4.23 | | Crippen Method |
| logp | 3.558 | | Crippen Method |
| mvol | 181.250 | ml/mol | McGowan Method |
| pc | 2064.24 | kPa | Joback Method |
| rinpol | 1513.00 | | NIST Webbook |
| rinpol | 1513.00 | | NIST Webbook |
| tb | 607.87 | K | Joback Method |
| tc | 799.01 | K | Joback Method |
| tf | 346.07 | K | Joback Method |
| vc | 0.710 | m ³ /kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|--------|---------|-----------------|---------------|
| cpg | 459.33 | J/molxK | 607.87 | Joback Method |
| cpg | 473.63 | J/molxK | 639.73 | Joback Method |
| cpg | 487.21 | J/molxK | 671.58 | Joback Method |
| cpg | 500.06 | J/molxK | 703.44 | Joback Method |
| cpg | 512.21 | J/molxK | 735.30 | Joback Method |
| cpg | 523.67 | J/molxK | 767.15 | Joback Method |
| cpg | 534.45 | J/molxK | 799.01 | Joback Method |

Sources

| | |
|------------------------|---|
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci9903071 |
| Crippen Method: | https://www.cheméo.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=U338783&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 |

Latest version available from:

<https://www.cheméo.com/cid/124-816-8/2-4-Difluorobenzoic-acid-isoheptyl-ester.pdf>

Generated by Cheméo on 2024-04-27 10:59:27.414439779 +0000 UTC m=+16504816.335017100.

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