

2,6-Difluoro-3-methylbenzoic acid, 2-tetradecyl ester

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| Inchi: | InChI=1S/C22H34F2O2/c1-4-5-6-7-8-9-10-11-12-13-14-18(3)26-22(25)20-19(23)16-15-1 |
| InchiKey: | WAZCNDQRHFIWLX-UHFFFAOYSA-N |
| Formula: | C22H34F2O2 |
| SMILES: | CCCCCCCCCCCC(C)OC(=O)c1c(F)ccc(C)c1F |
| Mol. weight [g/mol]: | 368.50 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|----------------------|----------------|
| gf | -408.10 | kJ/mol | Joback Method |
| hf | -937.59 | kJ/mol | Joback Method |
| hfus | 51.03 | kJ/mol | Joback Method |
| hvap | 75.96 | kJ/mol | Joback Method |
| log10ws | -8.41 | | Crippen Method |
| logp | 7.130 | | Crippen Method |
| mcvol | 308.060 | ml/mol | McGowan Method |
| pc | 1054.14 | kPa | Joback Method |
| rinpol | 2437.00 | | NIST Webbook |
| rinpol | 2437.00 | | NIST Webbook |
| tb | 818.77 | K | Joback Method |
| tc | 1007.66 | K | Joback Method |
| tf | 460.02 | K | Joback Method |
| vc | 1.214 | m ³ /kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|---------|---------|-----------------|---------------|
| cpg | 960.11 | J/mol×K | 818.77 | Joback Method |
| cpg | 977.95 | J/mol×K | 850.25 | Joback Method |
| cpg | 994.74 | J/mol×K | 881.73 | Joback Method |
| cpg | 1010.50 | J/mol×K | 913.22 | Joback Method |
| cpg | 1025.27 | J/mol×K | 944.70 | Joback Method |
| cpg | 1039.07 | J/mol×K | 976.18 | Joback Method |
| cpg | 1051.93 | J/mol×K | 1007.66 | Joback Method |

Sources

| | |
|------------------------|---|
| 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=U338586&Units=SI |
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci990307l |

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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