

4-Fluoro-2-trifluoromethylbenzoic acid, 2-methoxyethyl ester

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| Inchi: | InChI=1S/C11H10F4O3/c1-17-4-5-18-10(16)8-3-2-7(12)6-9(8)11(13,14)15/h2-3,6H,4-5H |
| InchiKey: | SUNWGN SZMSD IC B-UHFFFAOYSA-N |
| Formula: | C11H10F4O3 |
| SMILES: | COCCOC(=O)c1ccc(F)cc1C(F)(F)F |
| Mol. weight [g/mol]: | 266.19 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|----------|----------------------|----------------|
| gf | -980.43 | kJ/mol | Joback Method |
| hf | -1226.99 | kJ/mol | Joback Method |
| hfus | 26.39 | kJ/mol | Joback Method |
| hvap | 50.68 | kJ/mol | Joback Method |
| log10ws | -3.07 | | Crippen Method |
| logp | 2.648 | | Crippen Method |
| mcvol | 162.480 | ml/mol | McGowan Method |
| pc | 2256.81 | kPa | Joback Method |
| rinpol | 1335.00 | | NIST Webbook |
| rinpol | 1335.00 | | NIST Webbook |
| tb | 580.28 | K | Joback Method |
| tc | 764.52 | K | Joback Method |
| tf | 364.36 | K | Joback Method |
| vc | 0.646 | m ³ /kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|--------|---------|-----------------|---------------|
| cpg | 406.55 | J/mol×K | 580.28 | Joback Method |
| cpg | 418.44 | J/mol×K | 610.99 | Joback Method |
| cpg | 429.69 | J/mol×K | 641.69 | Joback Method |
| cpg | 440.32 | J/mol×K | 672.40 | Joback Method |
| cpg | 450.33 | J/mol×K | 703.11 | Joback Method |
| cpg | 459.74 | J/mol×K | 733.81 | Joback Method |
| cpg | 468.56 | J/mol×K | 764.52 | Joback Method |

Sources

| | |
|------------------------|---|
| NIST Webbook: | http://webbook.nist.gov/cgi/cbook.cgi?ID=U343765&Units=SI |
| 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 |

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

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