

Sebacic acid, 2-fluorophenyl undecyl ester

Inchi: InChI=1S/C27H43FO4/c1-2-3-4-5-6-7-10-13-18-23-31-26(29)21-14-11-8-9-12-15-22-27(30)28
InchiKey: ZGBLRTJUPXCEBS-UHFFFAOYSA-N
Formula: C27H43FO4
SMILES: CCCCCCCCCCOC(=O)CCCCCCCCC(=O)Oc1ccccc1F
Mol. weight [g/mol]: 450.63

Physical Properties

| Property code | Value | Unit | Source |
|---------------|----------|----------------------|----------------|
| gf | -383.41 | kJ/mol | Joback Method |
| hf | -1061.26 | kJ/mol | Joback Method |
| hfus | 67.99 | kJ/mol | Joback Method |
| hvap | 96.13 | kJ/mol | Joback Method |
| log10ws | -8.93 | | Crippen Method |
| logp | 7.926 | | Crippen Method |
| mvol | 384.180 | ml/mol | McGowan Method |
| pc | 841.62 | kPa | Joback Method |
| rinpol | 3212.00 | | NIST Webbook |
| rinpol | 3212.00 | | NIST Webbook |
| tb | 1000.67 | K | Joback Method |
| tc | 1229.47 | K | Joback Method |
| tf | 577.90 | K | Joback Method |
| vc | 1.506 | m ³ /kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|---------|---------|-----------------|---------------|
| cpg | 1313.16 | J/molxK | 1000.67 | Joback Method |
| cpg | 1331.08 | J/molxK | 1038.80 | Joback Method |
| cpg | 1347.32 | J/molxK | 1076.94 | Joback Method |
| cpg | 1361.94 | J/molxK | 1115.07 | Joback Method |
| cpg | 1375.00 | J/molxK | 1153.21 | Joback Method |
| cpg | 1386.57 | J/molxK | 1191.34 | Joback Method |
| cpg | 1396.71 | J/molxK | 1229.47 | Joback Method |

Sources

| | |
|------------------------|---|
| McGowan Method: | http://link.springer.com/article/10.1007/BF02311772 |
| NIST Webbook: | http://webbook.nist.gov/cgi/cbook.cgi?ID=U355005&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 |

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