

Succinic acid, 2,2,3,3-tetrafluoropropyl 2,3-dimethylphenyl ester

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| Inchi: | InChI=1S/C15H16F4O4/c1-9-4-3-5-11(10(9)2)23-13(21)7-6-12(20)22-8-15(18,19)14(16) |
| InchiKey: | FZJAIKLQOFPTCY-UHFFFAOYSA-N |
| Formula: | C15H16F4O4 |
| SMILES: | Cc1cccc(OC(=O)CCC(=O)OCC(F)(F)C(F)F)c1C |
| Mol. weight [g/mol]: | 336.28 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|----------|----------------------|----------------|
| gf | -1078.11 | kJ/mol | Joback Method |
| hf | -1427.41 | kJ/mol | Joback Method |
| hfus | 34.83 | kJ/mol | Joback Method |
| hvap | 65.94 | kJ/mol | Joback Method |
| log10ws | -4.32 | | Crippen Method |
| logp | 3.433 | | Crippen Method |
| mcvol | 220.410 | ml/mol | McGowan Method |
| pc | 1710.36 | kPa | Joback Method |
| rinpol | 1859.00 | | NIST Webbook |
| rinpol | 1859.00 | | NIST Webbook |
| tb | 725.23 | K | Joback Method |
| tc | 914.08 | K | Joback Method |
| tf | 444.37 | K | Joback Method |
| vc | 0.871 | m ³ /kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|--------|---------|-----------------|---------------|
| cpg | 627.01 | J/mol×K | 725.23 | Joback Method |
| cpg | 640.02 | J/mol×K | 756.71 | Joback Method |
| cpg | 652.20 | J/mol×K | 788.18 | Joback Method |
| cpg | 663.56 | J/mol×K | 819.66 | Joback Method |
| cpg | 674.13 | J/mol×K | 851.13 | Joback Method |
| cpg | 683.91 | J/mol×K | 882.61 | Joback Method |
| cpg | 692.94 | J/mol×K | 914.08 | Joback Method |

Sources

| | |
|------------------------|---|
| 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=U390013&Units=SI |
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci990307I |
| Crippen Method: | https://www.cheméo.com/doc/models/crippen_log10ws |

Legend

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|------------------|---|
| 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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