# Succinic acid, ethyl 4-trifluoromethoxybenzyl ester

**Inchi:** InChI=1S/C14H15F3O5/c1-2-20-12(18)7-8-13(19)21-9-10-3-5-11(6-4-10)22-14(15,16)17
**InchiKey:** KKEJXQUCMJRKBV-UHFFFAOYSA-N
**Formula:** C14H15F3O5
**SMILES:** CCOC(=O)CCC(=O)OCc1ccc(OC(F)(F)F)cc1
**Mol. weight [g/mol]:** 320.26

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -984.65 | kJ/mol | Joback Method |
| hf | -1326.13 | kJ/mol | Joback Method |
| hfus | 34.26 | kJ/mol | Joback Method |
| hvap | 66.67 | kJ/mol | Joback Method |
| log10ws | -3.86 | | Crippen Method |
| logp | 2.972 | | Crippen Method |
| mcvol | 210.420 | ml/mol | McGowan Method |
| pc | 1911.91 | kPa | Joback Method |
| rinpol | 1747.00 | | NIST Webbook |
| rinpol | 1747.00 | | NIST Webbook |
| tb | 720.96 | K | Joback Method |
| tc | 913.09 | K | Joback Method |
| tf | 457.22 | K | Joback Method |
| vc | 0.821 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 592.68 | J/mol×K | 720.96 | Joback Method |
| cpg | 605.42 | J/mol×K | 752.98 | Joback Method |
| cpg | 617.32 | J/mol×K | 785.00 | Joback Method |
| cpg | 628.39 | J/mol×K | 817.03 | Joback Method |
| cpg | 638.64 | J/mol×K | 849.05 | Joback Method |
| cpg | 648.07 | J/mol×K | 881.07 | Joback Method |
| cpg | 656.71 | J/mol×K | 913.09 | Joback Method |

# Sources

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|---|---|
| **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=U381560&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.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 |
| **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 |
| **rinpol:** | Non-polar retention indices |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |