# Succinic acid, 2,2,3,3-tetrafluoropropyl pentafluorobenzyl ester

**Inchi:** InChI=1S/C14H9F9O4/c15-8-5(9(16)11(18)12(19)10(8)17)3-26-6(24)1-2-7(25)27-4-14(22

**InchiKey:** FIAASMFUHZQLSN-UHFFFAOYSA-N

**Formula:** C14H9F9O4

**SMILES:** O=C(CCC(=O)OCC(F)(F)C(F)F)OCc1c(F)c(F)c(F)c(F)c1F

**Mol. weight [g/mol]:** 412.20

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -2089.47 | kJ/mol | Joback Method |
| hf | -2421.73 | kJ/mol | Joback Method |
| hfus | 46.47 | kJ/mol | Joback Method |
| hvap | 61.62 | kJ/mol | Joback Method |
| log10ws | -5.29 | | Crippen Method |
| logp | 3.649 | | Crippen Method |
| mcvol | 215.170 | ml/mol | McGowan Method |
| pc | 1488.44 | kPa | Joback Method |
| rinpol | 1656.00 | | NIST Webbook |
| rinpol | 1656.00 | | NIST Webbook |
| tb | 713.64 | K | Joback Method |
| tc | 882.15 | K | Joback Method |
| tf | 473.61 | K | Joback Method |
| vc | 0.904 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 610.23 | J/mol×K | 713.64 | Joback Method |
| cpg | 620.62 | J/mol×K | 741.73 | Joback Method |
| cpg | 630.40 | J/mol×K | 769.81 | Joback Method |
| cpg | 639.58 | J/mol×K | 797.90 | Joback Method |
| cpg | 648.16 | J/mol×K | 825.98 | Joback Method |
| cpg | 656.17 | J/mol×K | 854.07 | Joback Method |
| cpg | 663.59 | J/mol×K | 882.15 | 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=U389877&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |

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