# Succinic acid, 2,2,3,3,4,4,5,5-octafluoropentyl but-2-en-1-yl ester

**Inchi:** InChI=1S/C13H14F8O4/c1-2-3-6-24-8(22)4-5-9(23)25-7-11(16,17)13(20,21)12(18,19)10(

**InchiKey:** NXUYBENKVTZHKJ-NSCUHMNNSA-N

**Formula:** C13H14F8O4

**SMILES:** CC=CCOC(=O)CCC(=O)OCC(F)(F)C(F)(F)C(F)(F)C(F)F

**Mol. weight [g/mol]:** 386.24

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -1881.44 | kJ/mol | Joback Method |
| hf | -2284.44 | kJ/mol | Joback Method |
| hfus | 34.08 | kJ/mol | Joback Method |
| hvap | 51.99 | kJ/mol | Joback Method |
| log10ws | -4.10 | | Crippen Method |
| logp | 3.600 | | Crippen Method |
| mcvol | 218.770 | ml/mol | McGowan Method |
| pc | 1460.13 | kPa | Joback Method |
| rinpol | 1473.00 | | NIST Webbook |
| rinpol | 1473.00 | | NIST Webbook |
| tb | 637.61 | K | Joback Method |
| tc | 797.65 | K | Joback Method |
| tf | 372.49 | K | Joback Method |
| vc | 0.896 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 620.32 | J/mol×K | 637.61 | Joback Method |
| cpg | 632.54 | J/mol×K | 664.28 | Joback Method |
| cpg | 644.02 | J/mol×K | 690.96 | Joback Method |
| cpg | 654.82 | J/mol×K | 717.63 | Joback Method |
| cpg | 664.95 | J/mol×K | 744.31 | Joback Method |
| cpg | 674.47 | J/mol×K | 770.98 | Joback Method |
| cpg | 683.40 | J/mol×K | 797.65 | Joback Method |

# Sources

| | |
|---|---|
| **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 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U391219&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |

# 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 |