# Succinic acid, phenethyl pentafluorobenzyl ester

**Inchi:** InChI=1S/C19H15F5O4/c20-15-12(16(21)18(23)19(24)17(15)22)10-28-14(26)7-6-13(25)
**InchiKey:** AWKWYZBURKPZBL-UHFFFAOYSA-N
**Formula:** C19H15F5O4
**SMILES:** O=C(CCC(=O)OCc1c(F)c(F)c(F)c(F)c1F)OCCc1ccccc1
**Mol. weight [g/mol]:** 402.31

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -1156.12 | kJ/mol | Joback Method |
| hf | -1489.93 | kJ/mol | Joback Method |
| hfus | 52.08 | kJ/mol | Joback Method |
| hvap | 79.98 | kJ/mol | Joback Method |
| log10ws | -5.86 | | Crippen Method |
| logp | 3.991 | | Crippen Method |
| mcvol | 254.780 | ml/mol | McGowan Method |
| pc | 1493.04 | kPa | Joback Method |
| rinpol | 2372.00 | | NIST Webbook |
| tb | 861.31 | K | Joback Method |
| tc | 1063.19 | K | Joback Method |
| tf | 566.60 | K | Joback Method |
| vc | 1.022 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 756.49 | J/mol×K | 861.31 | Joback Method |
| cpg | 768.06 | J/mol×K | 894.96 | Joback Method |
| cpg | 778.61 | J/mol×K | 928.60 | Joback Method |
| cpg | 788.16 | J/mol×K | 962.25 | Joback Method |
| cpg | 796.72 | J/mol×K | 995.90 | Joback Method |
| cpg | 804.29 | J/mol×K | 1029.55 | Joback Method |
| cpg | 810.89 | J/mol×K | 1063.19 | 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=U358005&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 |