

# Succinic acid, 2,2,3,3-tetrafluoropropyl trans-4-tert-butylcyclohexyl ester

<b>Inchi:</b>	InChI=1S/C17H26F4O4/c1-16(2,3)11-4-6-12(7-5-11)25-14(23)9-8-13(22)24-10-17(20,21)
<b>InchiKey:</b>	WFRMIUSUUKQOJA-UHFFFAOYSA-N
<b>Formula:</b>	C17H26F4O4
<b>SMILES:</b>	CC(C)(C)C1CCC(OC(=O)CCC(=O)OCC(F)(F)C(F)F)CC1
<b>Mol. weight [g/mol]:</b>	370.38

## Physical Properties

Property code	Value	Unit	Source
gf	-1134.84	kJ/mol	Joback Method
hf	-1657.05	kJ/mol	Joback Method
hfus	32.23	kJ/mol	Joback Method
hvap	65.62	kJ/mol	Joback Method
log10ws	-4.81		Crippen Method
logp	4.358		Crippen Method
mcvol	261.490	ml/mol	McGowan Method
pc	1351.64	kPa	Joback Method
rinpol	1954.00		NIST Webbook
rinpol	1954.00		NIST Webbook
tb	746.00	K	Joback Method
tc	934.25	K	Joback Method
tf	421.01	K	Joback Method
vc	1.012	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	824.03	J/molxK	746.00	Joback Method
cpg	841.56	J/molxK	777.38	Joback Method
cpg	857.92	J/molxK	808.75	Joback Method
cpg	873.17	J/molxK	840.13	Joback Method
cpg	887.34	J/molxK	871.50	Joback Method
cpg	900.46	J/molxK	902.88	Joback Method
cpg	912.58	J/molxK	934.25	Joback Method

# Sources

<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U390194&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U390194&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>
<b>Crippen Method:</b>	<a href="https://www.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.com/doc/models/crippen_log10ws</a>
<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>

# Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>h vap:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>r in pol:</b>	Non-polar retention indices
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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