

Succinic acid, cis-4-methylcyclohexyl trans-4-methylcyclohexyl ester

Inchi:	InChI=1S/C18H30O4/c1-13-3-7-15(8-4-13)21-17(19)11-12-18(20)22-16-9-5-14(2)6-10-16
InchiKey:	GUEFKTFJTJMFQU-UHFFFAOYSA-N
Formula:	C18H30O4
SMILES:	CC1CCC(OC(=O)CCC(=O)OC2CCC(C)CC2)CC1
Mol. weight [g/mol]:	310.43

Physical Properties

Property code	Value	Unit	Source
gf	-333.68	kJ/mol	Joback Method
hf	-836.49	kJ/mol	Joback Method
hfus	33.76	kJ/mol	Joback Method
hvap	74.21	kJ/mol	Joback Method
log10ws	-4.61		Crippen Method
logp	4.010		Crippen Method
mvol	257.640	ml/mol	McGowan Method
pc	1587.28	kPa	Joback Method
rinpol	2228.00		NIST Webbook
rinpol	2228.00		NIST Webbook
tb	793.58	K	Joback Method
tc	1010.82	K	Joback Method
tf	443.22	K	Joback Method
vc	0.956	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	848.45	J/molxK	793.58	Joback Method
cpg	937.37	J/molxK	974.61	Joback Method
cpg	922.96	J/molxK	938.41	Joback Method
cpg	906.88	J/molxK	902.20	Joback Method
cpg	889.10	J/molxK	865.99	Joback Method
cpg	869.63	J/molxK	829.79	Joback Method
cpg	950.10	J/molxK	1010.82	Joback Method
dvisc	0.0001224	Paxs	793.58	Joback Method

dvisc	0.0001572	Paxs	735.19	Joback Method
dvisc	0.0002106	Paxs	676.79	Joback Method
dvisc	0.0002983	Paxs	618.40	Joback Method
dvisc	0.0004543	Paxs	560.01	Joback Method
dvisc	0.0007632	Paxs	501.61	Joback Method
dvisc	0.0014697	Paxs	443.22	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390077&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
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

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