Succinic acid, di(cyclohexyl) ester

Other names: Dicyclohexyl butanedioate
Inchi: InChI=1S/C16H26O4/c17-15(19-13-7-3-1-4-8-13)11-12-16(18)20-14-9-5-2-6-10-14/h13-1
InchiKey: WWQSMJYMCWMODI-UHFFFAOYSA-N
Formula: C16H26O4
SMILES: O=C(CCC(=O)OC1CCCCC1)OC1CCCCC1
Mol. weight [g/mol]: 282.38

Physical Properties

Property code	Value	Unit	Source
gf	-335.10	kJ/mol	Joback Method
hf	-754.53	kJ/mol	Joback Method
hfus	26.44	kJ/mol	Joback Method
hvap	70.38	kJ/mol	Joback Method
log10ws	-4.26		Crippen Method
logp	3.518		Crippen Method
mcvol	229.460	ml/mol	McGowan Method
pc	1971.80	kPa	Joback Method
rinpol	2053.00		NIST Webbook
rinpol	2019.00		NIST Webbook
rinpol	2053.00		NIST Webbook
rinpol	2060.00		NIST Webbook
rinpol	2068.00		NIST Webbook
rinpol	2076.00		NIST Webbook
rinpol	2019.00		NIST Webbook
tb	757.16	K	Joback Method
tc	980.25	K	Joback Method
tf	429.16	K	Joback Method
vc	0.846	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	724.59	J/mol×K	757.16	Joback Method
cpg	745.08	J/mol×K	794.34	Joback Method

cpg	763.96	J/mol×K	831.52	Joback Method
cpg	781.25	J/mol×K	868.71	Joback Method
cpg	796.98	J/mol×K	905.89	Joback Method
cpg	811.18	J/mol×K	943.07	Joback Method
cpg	823.85	J/mol×K	980.25	Joback Method
dvisc	0.0016994	Pa×s	429.16	Joback Method
dvisc	0.0008127	Pa×s	483.83	Joback Method
dvisc	0.0004514	Pa×s	538.49	Joback Method
dvisc	0.0002794	Pa×s	593.16	Joback Method
dvisc	0.0001876	Pa×s	647.83	Joback Method
dvisc	0.0001340	Pa×s	702.49	Joback Method
dvisc	0.0001004	Pa×s	757.16	Joback Method

Sources

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
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=U330023&Units=SI

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