Maleic acid, dicyclohexyl ester

Other names:	dicyclohexyl maleate
Inchi:	InChI=1S/C16H24O4/c17-15(19-13-7-3-1-4-8-13)11-12-16(18)20-14-9-5-2-6-10-14/h11-1
InchiKey:	BLKQQTCUGZJWLN-UHFFFAOYSA-N
Formula:	C16H24O4
SMILES:	O=C(C=CC(=O)OC1CCCCC1)OC1CCCCC1
Mol. weight [g/mol]:	280.36
CAS:	621-13-6

Physical Properties

Property code	Value	Unit	Source
gf	-254.88	kJ/mol	Joback Method
hf	-637.31	kJ/mol	Joback Method
hfus	26.64	kJ/mol	Joback Method
hvap	70.34	kJ/mol	Joback Method
log10ws	-4.11		Crippen Method
logp	3.294		Crippen Method
mcvol	225.160	ml/mol	McGowan Method
pc	2066.12	kPa	Joback Method
tb	761.32	K	Joback Method
tc	992.32	K	Joback Method
tf	424.08	K	Joback Method
vc	0.826	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	700.35	J/mol×K	761.32	Joback Method
cpg	720.42	J/mol×K	799.82	Joback Method
cpg	738.85	J/mol×K	838.32	Joback Method
cpg	755.70	J/mol×K	876.82	Joback Method
cpg	770.99	J/mol×K	915.32	Joback Method
cpg	784.78	J/mol×K	953.82	Joback Method
cpg	797.10	J/mol×K	992.32	Joback Method
dvisc	0.0015830	Pa×s	424.08	Joback Method

dvisc	0.0007354	Pa×s	480.29	Joback Method
dvisc	0.0004011	Pa×s	536.49	Joback Method
dvisc	0.0002455	Pa×s	592.70	Joback Method
dvisc	0.0001636	Pa×s	648.91	Joback Method
dvisc	0.0001163	Pa×s	705.11	Joback Method
dvisc	0.0000869	Pa×s	761.32	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=C621136&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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