Succinic acid, cyclohexylmethyl 1-cyclopentylethyl ester

Inchi: InChI=1S/C18H30O4/c1-14(16-9-5-6-10-16)22-18(20)12-11-17(19)21-13-15-7-3-2-4-8-15
InchiKey: LHWJATSHKCPYLT-UHFFFAOYSA-N
Formula: C18H30O4
SMILES: CC(OC(=O)CCC(=O)OCC1CCCCC1)C1CCCC1
Mol. weight [g/mol]: 310.43

Physical Properties

Property code	Value	Unit	Source
gf	-308.60	kJ/mol	Joback Method
hf	-794.93	kJ/mol	Joback Method
hfus	30.20	kJ/mol	Joback Method
hvap	74.27	kJ/mol	Joback Method
log10ws	-4.50		Crippen Method
logp	4.012		Crippen Method
mcvol	257.640	ml/mol	McGowan Method
pc	1651.11	kPa	Joback Method
rinpol	2331.00		NIST Webbook
rinpol	2331.00		NIST Webbook
tb	798.21	K	Joback Method
tc	1013.65	K	Joback Method
tf	440.22	K	Joback Method
vc	0.960	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	838.92	J/mol×K	798.21	Joback Method
cpg	858.93	J/mol×K	834.12	Joback Method
cpg	877.40	J/mol×K	870.02	Joback Method
cpg	894.36	J/mol×K	905.93	Joback Method
cpg	909.85	J/mol×K	941.84	Joback Method
cpg	923.91	J/mol×K	977.74	Joback Method
cpg	936.56	J/mol×K	1013.65	Joback Method
dvisc	0.0017454	Pa×s	440.22	Joback Method

dvisc	0.0008136	Pa×s	499.88	Joback Method
dvisc	0.0004463	Pa×s	559.55	Joback Method
dvisc	0.0002749	Pa×s	619.22	Joback Method
dvisc	0.0001843	Pa×s	678.88	Joback Method
dvisc	0.0001319	Pa×s	738.55	Joback Method
dvisc	0.0000992	Pa×s	798.21	Joback Method

Sources

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=U391413&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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