Sebacic acid, 1-naphthyl propyl ester

Inchi: InChI=1S/C23H30O4/c1-2-18-26-22(24)16-7-5-3-4-6-8-17-23(25)27-21-15-11-13-19-12-9
InchiKey: SZGNXJMGJCUGFU-UHFFFAOYSA-N
Formula: C23H30O4
SMILES: CCCOC(=O)CCCCCCCCC(=O)Oc1cccc2ccccc12
Mol. weight [g/mol]: 370.48

Physical Properties

Property code	Value	Unit	Source
gf	-115.63	kJ/mol	Joback Method
hf	-591.52	kJ/mol	Joback Method
hfus	51.57	kJ/mol	Joback Method
hvap	89.68	kJ/mol	Joback Method
log10ws	-7.06		Crippen Method
logp	5.819		Crippen Method
mcvol	306.590	ml/mol	McGowan Method
pc	1300.47	kPa	Joback Method
rinpol	3054.00		NIST Webbook
tb	928.86	K	Joback Method
tc	1143.95	K	Joback Method
tf	564.93	K	Joback Method
vc	1.185	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	979.65	J/mol×K	928.86	Joback Method
cpg	1044.64	J/mol×K	1108.10	Joback Method
cpg	1033.68	J/mol×K	1072.25	Joback Method
cpg	1021.76	J/mol×K	1036.41	Joback Method
cpg	1008.82	J/mol×K	1000.56	Joback Method
cpg	994.80	J/mol×K	964.71	Joback Method
cpg	1054.71	J/mol×K	1143.95	Joback Method
dvisc	0.0000729	Pa×s	928.86	Joback Method
dvisc	0.0000906	Pa×s	868.20	Joback Method

dvisc	0.0001164	Pa×s	807.55	Joback Method
dvisc	0.0001558	Pa×s	746.89	Joback Method
dvisc	0.0002195	Pa×s	686.24	Joback Method
dvisc	0.0003305	Pa×s	625.59	Joback Method
dvisc	0.0005434	Pa×s	564.93	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=U354804&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