Succinic acid, dec-2-yl 2-naphthylmethyl ester

Inchi: InChI=1S/C25H34O4/c1-3-4-5-6-7-8-11-20(2)29-25(27)17-16-24(26)28-19-21-14-15-22-1
InchiKey: CENDTVJIZQUVIK-UHFFFAOYSA-N
Formula: C25H34O4
SMILES: CCCCCCCCC(C)OC(=O)CCC(=O)OCc1ccc2ccccc2c1
Mol. weight [g/mol]: 398.54

Physical Properties

Property code	Value	Unit	Source
gf	-101.23	kJ/mol	Joback Method
hf	-638.08	kJ/mol	Joback Method
hfus	53.23	kJ/mol	Joback Method
hvap	93.75	kJ/mol	Joback Method
log10ws	-7.85		Crippen Method
logp	6.346		Crippen Method
mcvol	334.770	ml/mol	McGowan Method
pc	1143.66	kPa	Joback Method
rinpol	3097.00		NIST Webbook
rinpol	3097.00		NIST Webbook
tb	974.18	K	Joback Method
tc	1194.89	K	Joback Method
tf	572.47	K	Joback Method
vc	1.292	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1101.23	J/mol×K	974.18	Joback Method
cpg	1116.86	J/mol×K	1010.97	Joback Method
cpg	1131.26	J/mol×K	1047.75	Joback Method
cpg	1144.51	J/mol×K	1084.54	Joback Method
cpg	1156.67	J/mol×K	1121.32	Joback Method
cpg	1167.82	J/mol×K	1158.11	Joback Method
cpg	1178.03	J/mol×K	1194.89	Joback Method
dvisc	0.0004765	Pa×s	572.47	Joback Method

dvisc	0.0002691	Pa×s	639.42	Joback Method
dvisc	0.0001694	Pa×s	706.37	Joback Method
dvisc	0.0001155	Pa×s	773.33	Joback Method
dvisc	0.0000837	Pa×s	840.28	Joback Method
dvisc	0.0000636	Pa×s	907.23	Joback Method
dvisc	0.0000502	Pa×s	974.18	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=U390007&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