Succinic acid, naphth-2-ylmethyl tetrahydrofurfuryl ester

Inchi: InChI=1S/C20H22O5/c21-19(9-10-20(22)25-14-18-6-3-11-23-18)24-13-15-7-8-16-4-1-2-5

InchiKey: GKFACCNMXKWMAW-UHFFFAOYSA-N

Formula: C20H22O5

SMILES: O=C(CCC(=O)OCC1CCCO1)OCc1ccc2ccccc2c1

Mol. weight [g/mol]: 342.39

Physical Properties

Property code	Value	Unit	Source
gf	-190.46	kJ/mol	Joback Method
hf	-601.12	kJ/mol	Joback Method
hfus	45.71	kJ/mol	Joback Method
hvap	87.77	kJ/mol	Joback Method
log10ws	-4.74		Crippen Method
logp	3.385		Crippen Method
mcvol	259.330	ml/mol	McGowan Method
pc	1867.55	kPa	Joback Method
rinpol	2527.00		NIST Webbook
rinpol	2527.00		NIST Webbook
tb	902.45	K	Joback Method
tc	1134.04	K	Joback Method
tf	568.59	K	Joback Method
vc	0.980	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	823.10	J/mol×K	902.45	Joback Method
cpg	837.32	J/mol×K	941.05	Joback Method
cpg	850.30	J/mol×K	979.65	Joback Method
cpg	862.08	J/mol×K	1018.25	Joback Method
cpg	872.76	J/mol×K	1056.85	Joback Method
cpg	882.40	J/mol×K	1095.44	Joback Method
cpg	891.07	J/mol×K	1134.04	Joback Method
dvisc	0.0008528	Pa×s	568.59	Joback Method

dvisc	0.0005539	Pa×s	624.23	Joback Method
dvisc	0.0003861	Pa×s	679.88	Joback Method
dvisc	0.0002842	Pa×s	735.52	Joback Method
dvisc	0.0002185	Pa×s	791.16	Joback Method
dvisc	0.0001738	Pa×s	846.81	Joback Method
dvisc	0.0001422	Pa×s	902.45	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390730&Units=SI
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

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