Succinic acid, naphth-2-ylmethyl 2-methoxyethyl ester

Inchi: InChI=1S/C18H20O5/c1-21-10-11-22-17(19)8-9-18(20)23-13-14-6-7-15-4-2-3-5-16(15)12

InchiKey: IGOZRVBVBKTKTH-UHFFFAOYSA-N

Formula: C18H20O5

SMILES: COCCOC(=O)CCC(=O)OCc1ccc2ccccc2c1

Mol. weight [g/mol]: 316.35

Physical Properties

Property code	Value	Unit	Source
gf	-262.73	kJ/mol	Joback Method
hf	-620.54	kJ/mol	Joback Method
hfus	39.81	kJ/mol	Joback Method
hvap	80.96	kJ/mol	Joback Method
log10ws	-3.90		Crippen Method
logp	2.853		Crippen Method
mcvol	242.010	ml/mol	McGowan Method
pc	1874.03	kPa	Joback Method
rinpol	2711.00		NIST Webbook
rinpol	2711.00		NIST Webbook
tb	836.88	K	Joback Method
tc	1052.50	K	Joback Method
tf	530.81	K	Joback Method
vc	0.923	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	716.04	J/mol×K	836.88	Joback Method
cpg	773.37	J/mol×K	1016.56	Joback Method
cpg	763.95	J/mol×K	980.62	Joback Method
cpg	753.54	J/mol×K	944.69	Joback Method
cpg	742.10	J/mol×K	908.75	Joback Method
cpg	729.61	J/mol×K	872.82	Joback Method
cpg	781.83	J/mol×K	1052.50	Joback Method
dvisc	0.0001062	Pa×s	836.88	Joback Method

dvisc	0.0001295	Pa×s	785.87	Joback Method
dvisc	0.0001621	Pa×s	734.86	Joback Method
dvisc	0.0002100	Pa×s	683.85	Joback Method
dvisc	0.0002836	Pa×s	632.83	Joback Method
dvisc	0.0004037	Pa×s	581.82	Joback Method
dvisc	0.0006150	Pa×s	530.81	Joback Method

Sources

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=U390752&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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