Succinic acid, naphth-2-ylmethyl 2-methoxy-5-methylphenyl ester

Inchi: InChI=1S/C23H22O5/c1-16-7-10-20(26-2)21(13-16)28-23(25)12-11-22(24)27-15-17-8-9-

InchiKey: NNAUBWJCNSVSEK-UHFFFAOYSA-N

Formula: C23H22O5

SMILES: COc1ccc(C)cc1OC(=O)CCC(=O)OCc1ccc2ccccc2c1

Mol. weight [g/mol]: 378.42

Physical Properties

Property code	Value	Unit	Source
gf	-127.48	kJ/mol	Joback Method
hf	-510.15	kJ/mol	Joback Method
hfus	46.02	kJ/mol	Joback Method
hvap	95.69	kJ/mol	Joback Method
log10ws	-6.41		Crippen Method
logp	4.586		Crippen Method
mcvol	288.700	ml/mol	McGowan Method
pc	1614.17	kPa	Joback Method
rinpol	3286.00		NIST Webbook
rinpol	3286.00		NIST Webbook
tb	987.92	K	Joback Method
tc	1225.53	K	Joback Method
tf	638.62	K	Joback Method
vc	1.095	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	898.75	J/mol×K	987.92	Joback Method
cpg	944.88	J/mol×K	1185.93	Joback Method
cpg	938.16	J/mol×K	1146.33	Joback Method
cpg	930.23	J/mol×K	1106.73	Joback Method
cpg	921.06	J/mol×K	1067.12	Joback Method
cpg	910.58	J/mol×K	1027.52	Joback Method
cpg	950.46	J/mol×K	1225.53	Joback Method
dvisc	0.0000600	Pa×s	987.92	Joback Method

dvisc	0.0000724	Pa×s	929.70	Joback Method
dvisc	0.0000895	Pa×s	871.49	Joback Method
dvisc	0.0001140	Pa×s	813.27	Joback Method
dvisc	0.0001508	Pa×s	755.05	Joback Method
dvisc	0.0002090	Pa×s	696.84	Joback Method
dvisc	0.0003074	Pa×s	638.62	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390971&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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