

Succinic acid, 2-naphthylmethyl 3-pentyl ester

Inchi:	InChI=1S/C20H24O4/c1-3-18(4-2)24-20(22)12-11-19(21)23-14-15-9-10-16-7-5-6-8-17(16)
InchiKey:	UQZMAMUVTIUKRL-UHFFFAOYSA-N
Formula:	C20H24O4
SMILES:	CCC(CC)OC(=O)CCC(=O)OCc1ccc2ccccc2c1
Mol. weight [g/mol]:	328.40

Physical Properties

Property code	Value	Unit	Source
gf	-143.33	kJ/mol	Joback Method
hf	-534.88	kJ/mol	Joback Method
hfus	40.28	kJ/mol	Joback Method
hvap	82.62	kJ/mol	Joback Method
log10ws	-5.76		Crippen Method
logp	4.395		Crippen Method
mcvol	264.320	ml/mol	McGowan Method
pc	1629.85	kPa	Joback Method
rinpol	2529.00		NIST Webbook
tb	859.78	K	Joback Method
tc	1076.09	K	Joback Method
tf	516.12	K	Joback Method
vc	1.012	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	803.39	J/mol×K	859.78	Joback Method
cpg	818.05	J/mol×K	895.83	Joback Method
cpg	831.60	J/mol×K	931.88	Joback Method
cpg	844.10	J/mol×K	967.94	Joback Method
cpg	855.60	J/mol×K	1003.99	Joback Method
cpg	866.15	J/mol×K	1040.04	Joback Method
cpg	875.79	J/mol×K	1076.09	Joback Method
dvisc	0.0007738	Paxs	516.12	Joback Method
dvisc	0.0004631	Paxs	573.40	Joback Method

dvisc	0.0003042	Paxs	630.67	Joback Method
dvisc	0.0002143	Paxs	687.95	Joback Method
dvisc	0.0001594	Paxs	745.23	Joback Method
dvisc	0.0001236	Paxs	802.50	Joback Method
dvisc	0.0000992	Paxs	859.78	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=U370920&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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

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