

Sarcosine, N-(1-naphthoyl)-, pentyl ester

Inchi:	InChI=1S/C19H23NO3/c1-3-4-7-13-23-18(21)14-20(2)19(22)17-12-8-10-15-9-5-6-11-16(
InchiKey:	GMLAGKZURTUBGK-UHFFFAOYSA-N
Formula:	C19H23NO3
SMILES:	CCCCCOC(=O)CN(C)C(=O)c1cccc2ccccc12
Mol. weight [g/mol]:	313.39

Physical Properties

Property code	Value	Unit	Source
gf	66.47	kJ/mol	Joback Method
hf	-309.21	kJ/mol	Joback Method
hfus	43.04	kJ/mol	Joback Method
hvap	80.41	kJ/mol	Joback Method
log10ws	-4.79		Crippen Method
logp	3.645		Crippen Method
mvol	254.340	ml/mol	McGowan Method
pc	1774.35	kPa	Joback Method
rinpol	2612.00		NIST Webbook
rinpol	2612.00		NIST Webbook
tb	827.36	K	Joback Method
tc	1041.53	K	Joback Method
tf	530.09	K	Joback Method
vc	0.962	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	759.08	J/mol×K	827.36	Joback Method
cpg	773.86	J/mol×K	863.06	Joback Method
cpg	787.63	J/mol×K	898.75	Joback Method
cpg	800.45	J/mol×K	934.45	Joback Method
cpg	812.40	J/mol×K	970.14	Joback Method
cpg	823.55	J/mol×K	1005.84	Joback Method
cpg	833.96	J/mol×K	1041.53	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.cheméo.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=U321402&Units=SI

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvp:	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
rinp:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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