

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

Inchi:	InChI=1S/C24H33NO3/c1-3-4-5-6-7-8-9-12-18-28-23(26)19-25(2)24(27)22-17-13-15-20-
InchiKey:	QHPLMMHFTRIJIC-UHFFFAOYSA-N
Formula:	C24H33NO3
SMILES:	CCCCCCCCCOC(=O)CN(C)C(=O)c1cccc2ccccc12
Mol. weight [g/mol]:	383.52

Physical Properties

Property code	Value	Unit	Source
gf	108.57	kJ/mol	Joback Method
hf	-412.41	kJ/mol	Joback Method
hfus	55.99	kJ/mol	Joback Method
hvap	91.54	kJ/mol	Joback Method
log10ws	-6.89		Crippen Method
logp	5.596		Crippen Method
mcvol	324.790	ml/mol	McGowan Method
pc	1227.70	kPa	Joback Method
tb	941.76	K	Joback Method
tc	1157.31	K	Joback Method
tf	586.44	K	Joback Method
vc	1.242	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1054.22	J/molxK	941.76	Joback Method
cpg	1070.28	J/molxK	977.69	Joback Method
cpg	1085.30	J/molxK	1013.61	Joback Method
cpg	1099.36	J/molxK	1049.54	Joback Method
cpg	1112.55	J/molxK	1085.46	Joback Method
cpg	1124.95	J/molxK	1121.39	Joback Method
cpg	1136.66	J/molxK	1157.31	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U321408&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
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
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
mccvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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