

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

Inchi:	InChI=1S/C23H31NO3/c1-3-4-5-6-7-8-11-17-27-22(25)18-24(2)23(26)21-16-12-14-19-13
InchiKey:	NOHCNQRMBRCKN-UHFFFAOYSA-N
Formula:	C23H31NO3
SMILES:	CCCCCCCCCOC(=O)CN(C)C(=O)c1cccc2ccccc12
Mol. weight [g/mol]:	369.50

Physical Properties

Property code	Value	Unit	Source
gf	100.15	kJ/mol	Joback Method
hf	-391.77	kJ/mol	Joback Method
hfus	53.40	kJ/mol	Joback Method
hvap	89.31	kJ/mol	Joback Method
log10ws	-6.47		Crippen Method
logp	5.206		Crippen Method
mvol	310.700	ml/mol	McGowan Method
pc	1314.65	kPa	Joback Method
rinpol	3168.00		NIST Webbook
rinpol	3168.00		NIST Webbook
tb	918.88	K	Joback Method
tc	1132.60	K	Joback Method
tf	575.17	K	Joback Method
vc	1.185	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	993.71	J/mol×K	918.88	Joback Method
cpg	1009.49	J/mol×K	954.50	Joback Method
cpg	1024.22	J/mol×K	990.12	Joback Method
cpg	1038.01	J/mol×K	1025.74	Joback Method
cpg	1050.92	J/mol×K	1061.36	Joback Method
cpg	1063.05	J/mol×K	1096.98	Joback Method
cpg	1074.48	J/mol×K	1132.60	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U321407&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

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
rlnol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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