1-Naphthamide, N,N-didecyl-

Inchi: InChI=1S/C31H49NO/c1-3-5-7-9-11-13-15-19-26-32(27-20-16-14-12-10-8-6-4-2)31(33)3
InchiKey: MYACJXJWJRDIFU-UHFFFAOYSA-N
Formula: C31H49NO
SMILES: CCCCCCCCCCN(CCCCCCCCCC)C(=O)c1cccc2ccccc12
Mol. weight [g/mol]: 451.73

Physical Properties

Property code	Value	Unit	Source
gf	401.43	kJ/mol	Joback Method
hf	-312.09	kJ/mol	Joback Method
hfus	71.34	kJ/mol	Joback Method
hvap	97.97	kJ/mol	Joback Method
log10ws	-10.95		Crippen Method
logp	9.563		Crippen Method
mcvol	415.980	ml/mol	McGowan Method
pc	783.75	kPa	Joback Method
rinpol	3780.00		NIST Webbook
tb	1025.63	K	Joback Method
tc	1258.26	K	Joback Method
tf	593.17	K	Joback Method
vc	1.609	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1448.21	J/mol×K	1025.63	Joback Method
cpg	1469.66	J/mol×K	1064.40	Joback Method
cpg	1490.02	J/mol×K	1103.17	Joback Method
cpg	1509.45	J/mol×K	1141.95	Joback Method
cpg	1528.11	J/mol×K	1180.72	Joback Method
cpg	1546.17	J/mol×K	1219.49	Joback Method
cpg	1563.79	J/mol×K	1258.26	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U308694&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
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