1-Naphthamide, N-butyl-N-octyl-

Inchi: InChI=1S/C23H33NO/c1-3-5-7-8-9-12-19-24(18-6-4-2)23(25)22-17-13-15-20-14-10-11-1
InchiKey: DMRBOWIPOHSLLB-UHFFFAOYSA-N
Formula: C23H33NO
SMILES: CCCCCCCCN(CCCC)C(=O)c1cccc2ccccc12
Mol. weight [g/mol]: 339.51

Physical Properties

Property code	Value	Unit	Source
gf	334.07	kJ/mol	Joback Method
hf	-146.97	kJ/mol	Joback Method
hfus	50.62	kJ/mol	Joback Method
hvap	80.16	kJ/mol	Joback Method
log10ws	-7.61		Crippen Method
logp	6.443		Crippen Method
mcvol	303.260	ml/mol	McGowan Method
pc	1271.87	kPa	Joback Method
rinpol	3186.00		NIST Webbook
rinpol	3186.00		NIST Webbook
tb	842.59	K	Joback Method
tc	1047.11	K	Joback Method
tf	503.01	K	Joback Method
vc	1.161	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	946.15	J/mol×K	842.59	Joback Method
cpg	963.99	J/mol×K	876.68	Joback Method
cpg	980.81	J/mol×K	910.76	Joback Method
cpg	996.69	J/mol×K	944.85	Joback Method
cpg	1011.72	J/mol×K	978.93	Joback Method
cpg	1025.99	J/mol×K	1013.02	Joback Method
cpg	1039.58	J/mol×K	1047.11	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=U415720&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