1-Naphthamide, N-butyl-N-3-methylbutyl-

Inchi: InChI=1S/C20H27NO/c1-4-5-14-21(15-13-16(2)3)20(22)19-12-8-10-17-9-6-7-11-18(17)19
InchiKey: HDYGIMNXMFVYDK-UHFFFAOYSA-N
Formula: C20H27NO
SMILES: CCCCN(CCC(C)C)C(=O)c1cccc2ccccc12
Mol. weight [g/mol]: 297.43

Physical Properties

Property code	Value	Unit	Source
gf	306.37	kJ/mol	Joback Method
hf	-90.33	kJ/mol	Joback Method
hfus	39.32	kJ/mol	Joback Method
hvap	73.09	kJ/mol	Joback Method
log10ws	-6.11		Crippen Method
logp	5.128		Crippen Method
mcvol	260.990	ml/mol	McGowan Method
pc	1589.81	kPa	Joback Method
rinpol	2953.00		NIST Webbook
rinpol	2953.00		NIST Webbook
tb	773.51	K	Joback Method
tc	983.49	K	Joback Method
tf	454.20	K	Joback Method
vc	0.988	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	770.61	J/mol×K	773.51	Joback Method
cpg	788.05	J/mol×K	808.51	Joback Method
cpg	804.39	J/mol×K	843.50	Joback Method
cpg	819.73	J/mol×K	878.50	Joback Method
cpg	834.15	J/mol×K	913.50	Joback Method
cpg	847.73	J/mol×K	948.49	Joback Method
cpg	860.56	J/mol×K	983.49	Joback Method

Sources

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=U415716&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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