Pentanamide, N-(1-naphthyl)-

Inchi: InChI=1S/C15H17NO/c1-2-3-11-15(17)16-14-10-6-8-12-7-4-5-9-13(12)14/h4-10H,2-3,11
InchiKey: FOZJTWQCZFOTMH-UHFFFAOYSA-N
Formula: C15H17NO
SMILES: CCCCC(=O)Nc1cccc2ccccc12
Mol. weight [g/mol]: 227.30

Physical Properties

Property code	Value	Unit	Source
gf	245.32	kJ/mol	Joback Method
hf	4.09	kJ/mol	Joback Method
hfus	31.98	kJ/mol	Joback Method
hvap	66.74	kJ/mol	Joback Method
log10ws	-4.73		Crippen Method
logp	3.969		Crippen Method
mcvol	190.540	ml/mol	McGowan Method
pc	2448.32	kPa	Joback Method
rinpol	2119.00		NIST Webbook
tb	697.28	K	Joback Method
tc	920.72	K	Joback Method
tf	433.04	K	Joback Method
vc	0.731	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	511.32	J/mol×K	697.28	Joback Method
cpg	526.17	J/mol×K	734.52	Joback Method
cpg	539.98	J/mol×K	771.76	Joback Method
cpg	552.84	J/mol×K	809.00	Joback Method
cpg	564.83	J/mol×K	846.24	Joback Method
cpg	576.02	J/mol×K	883.48	Joback Method
cpg	586.50	J/mol×K	920.72	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=U306898&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