1-Naphthamide, N,N-diheptyl-

Inchi: InChI=1S/C25H37NO/c1-3-5-7-9-13-20-26(21-14-10-8-6-4-2)25(27)24-19-15-17-22-16-1
InchiKey: JZPUGAGDTURZAJ-UHFFFAOYSA-N
Formula: C25H37NO
SMILES: CCCCCCCN(CCCCCCC)C(=O)c1cccc2ccccc12
Mol. weight [g/mol]: 367.57

Physical Properties

Property code	Value	Unit	Source
gf	350.91	kJ/mol	Joback Method
hf	-188.25	kJ/mol	Joback Method
hfus	55.80	kJ/mol	Joback Method
hvap	84.61	kJ/mol	Joback Method
log10ws	-8.44		Crippen Method
logp	7.223		Crippen Method
mcvol	331.440	ml/mol	McGowan Method
pc	1114.08	kPa	Joback Method
rinpol	2757.00		NIST Webbook
rinpol	2757.00		NIST Webbook
tb	888.35	K	Joback Method
tc	1094.59	K	Joback Method
tf	525.55	K	Joback Method
vc	1.274	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1067.66	J/mol×K	888.35	Joback Method
cpg	1086.05	J/mol×K	922.72	Joback Method
cpg	1103.42	J/mol×K	957.10	Joback Method
cpg	1119.86	J/mol×K	991.47	Joback Method
cpg	1135.46	J/mol×K	1025.85	Joback Method
cpg	1150.34	J/mol×K	1060.22	Joback Method
cpg	1164.57	J/mol×K	1094.59	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U308691&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.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
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