2-Naphthamide, N-hexadecyl-

Inchi: InChI=1S/C27H41NO/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-17-22-28-27(29)26-21-20-24-18
InchiKey: FVLRXARCOJQLJV-UHFFFAOYSA-N
Formula: C27H41NO
SMILES: CCCCCCCCCCCCCCCCCNC(=O)c1ccc2ccccc2c1
Mol. weight [g/mol]: 395.62

Physical Properties

Property code	Value	Unit	Source
gf	346.36	kJ/mol	Joback Method
hf	-243.59	kJ/mol	Joback Method
hfus	63.05	kJ/mol	Joback Method
hvap	93.46	kJ/mol	Joback Method
log10ws	-9.90		Crippen Method
logp	8.051		Crippen Method
mcvol	359.620	ml/mol	McGowan Method
pc	993.25	kPa	Joback Method
rinpol	3554.00		NIST Webbook
rinpol	3554.00		NIST Webbook
tb	971.84	K	Joback Method
tc	1190.23	K	Joback Method
tf	568.28	K	Joback Method
vc	1.403	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1211.35	J/mol×K	971.84	Joback Method
cpg	1229.96	J/mol×K	1008.24	Joback Method
cpg	1247.55	J/mol×K	1044.64	Joback Method
cpg	1264.23	J/mol×K	1081.04	Joback Method
cpg	1280.11	J/mol×K	1117.43	Joback Method
cpg	1295.30	J/mol×K	1153.83	Joback Method
cpg	1309.93	J/mol×K	1190.23	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=U407361&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