1-Naphthamide, N-heptyl-N-octyl-

Inchi: InChI=1S/C26H39NO/c1-3-5-7-9-11-15-22-27(21-14-10-8-6-4-2)26(28)25-20-16-18-23-1
InchiKey: BSYKKLSEJXBCIS-UHFFFAOYSA-N
Formula: C26H39NO
SMILES: CCCCCCCCN(CCCCCCC)C(=O)c1cccc2ccccc12
Mol. weight [g/mol]: 381.59

Physical Properties

Property code	Value	Unit	Source
gf	359.33	kJ/mol	Joback Method
hf	-208.89	kJ/mol	Joback Method
hfus	58.39	kJ/mol	Joback Method
hvap	86.84	kJ/mol	Joback Method
log10ws	-8.86		Crippen Method
logp	7.613		Crippen Method
mcvol	345.530	ml/mol	McGowan Method
pc	1045.97	kPa	Joback Method
rinpol	2862.00		NIST Webbook
tb	911.23	K	Joback Method
tc	1119.51	K	Joback Method
tf	536.82	K	Joback Method
vc	1.329	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1129.51	J/mol×K	911.23	Joback Method
cpg	1148.24	J/mol×K	945.94	Joback Method
cpg	1165.94	J/mol×K	980.66	Joback Method
cpg	1182.71	J/mol×K	1015.37	Joback Method
cpg	1198.66	J/mol×K	1050.08	Joback Method
cpg	1213.89	J/mol×K	1084.80	Joback Method
cpg	1228.50	J/mol×K	1119.51	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=U308692&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