Benzamide, 4-methyl-N-hexadecyl-

Inchi: InChI=1S/C24H41NO/c1-3-4-5-6-7-8-9-10-11-12-13-14-15-16-21-25-24(26)23-19-17-22(
InchiKey: INYLCIGIHRTCFB-UHFFFAOYSA-N
Formula: C24H41NO
SMILES: CCCCCCCCCCCCCCCCCNC(=O)c1ccc(C)cc1
Mol. weight [g/mol]: 359.59

Physical Properties

Property code	Value	Unit	Source
gf	214.45	kJ/mol	Joback Method
hf	-372.74	kJ/mol	Joback Method
hfus	58.27	kJ/mol	Joback Method
hvap	85.14	kJ/mol	Joback Method
log10ws	-8.57		Crippen Method
logp	7.206		Crippen Method
mcvol	336.810	ml/mol	McGowan Method
pc	1020.73	kPa	Joback Method
rinpol	3054.00		NIST Webbook
tb	884.22	K	Joback Method
tc	1084.87	K	Joback Method
tf	501.77	K	Joback Method
vc	1.312	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1100.87	J/mol×K	884.22	Joback Method
cpg	1119.87	J/mol×K	917.66	Joback Method
cpg	1137.71	J/mol×K	951.10	Joback Method
cpg	1154.46	J/mol×K	984.54	Joback Method
cpg	1170.19	J/mol×K	1017.98	Joback Method
cpg	1184.95	J/mol×K	1051.42	Joback Method
cpg	1198.81	J/mol×K	1084.87	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U407479&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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