Benzamide, 4-methyl-N-tetradecyl-

Inchi: InChI=1S/C22H37NO/c1-3-4-5-6-7-8-9-10-11-12-13-14-19-23-22(24)21-17-15-20(2)16-18
InchiKey: QCSNGPNUGYIELV-UHFFFAOYSA-N
Formula: C22H37NO
SMILES: CCCCCCCCCCCCCCNC(=O)c1ccc(C)cc1
Mol. weight [g/mol]: 331.54

Physical Properties

Property code	Value	Unit	Source
gf	197.61	kJ/mol	Joback Method
hf	-331.46	kJ/mol	Joback Method
hfus	53.09	kJ/mol	Joback Method
hvap	80.69	kJ/mol	Joback Method
log10ws	-7.73		Crippen Method
logp	6.426		Crippen Method
mcvol	308.630	ml/mol	McGowan Method
pc	1158.50	kPa	Joback Method
rinpol	2846.00		NIST Webbook
tb	838.46	K	Joback Method
tc	1034.56	K	Joback Method
tf	479.23	K	Joback Method
vc	1.200	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	977.87	J/mol×K	838.46	Joback Method
cpg	996.25	J/mol×K	871.14	Joback Method
cpg	1013.55	J/mol×K	903.83	Joback Method
cpg	1029.82	J/mol×K	936.51	Joback Method
cpg	1045.11	J/mol×K	969.19	Joback Method
cpg	1059.47	J/mol×K	1001.87	Joback Method
cpg	1072.97	J/mol×K	1034.56	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U407478&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

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