Benzamide, 4-chloro-N-ethyl-N-tetradecyl-

Inchi: InChI=1S/C23H38ClNO/c1-3-5-6-7-8-9-10-11-12-13-14-15-20-25(4-2)23(26)21-16-18-22
InchiKey: VVIQKPMQQVHEJW-UHFFFAOYSA-N
Formula: C23H38ClNO
SMILES: CCCCCCCCCCCCCCN(CC)C(=O)c1ccc(Cl)cc1
Mol. weight [g/mol]: 380.01

Physical Properties

Property code	Value	Unit	Source
gf	215.49	kJ/mol	Joback Method
hf	-353.78	kJ/mol	Joback Method
hfus	57.79	kJ/mol	Joback Method
hvap	82.90	kJ/mol	Joback Method
log10ws	-8.16		Crippen Method
logp	7.503		Crippen Method
mcvol	334.960	ml/mol	McGowan Method
pc	1050.05	kPa	Joback Method
rinpol	3297.00		NIST Webbook
rinpol	3297.00		NIST Webbook
tb	861.04	K	Joback Method
tc	1059.29	K	Joback Method
tf	500.23	K	Joback Method
vc	1.288	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1049.53	J/mol×K	861.04	Joback Method
cpg	1067.88	J/mol×K	894.08	Joback Method
cpg	1085.14	J/mol×K	927.12	Joback Method
cpg	1101.37	J/mol×K	960.16	Joback Method
cpg	1116.65	J/mol×K	993.20	Joback Method
cpg	1131.02	J/mol×K	1026.24	Joback Method
cpg	1144.57	J/mol×K	1059.29	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U415335&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

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