Benzamide, 4-chloro-N-ethyl-N-pentyl-

Inchi: InChI=1S/C14H20ClNO/c1-3-5-6-11-16(4-2)14(17)12-7-9-13(15)10-8-12/h7-10H,3-6,11H
InchiKey: UDBSQOSDFYNALE-UHFFFAOYSA-N
Formula: C14H20ClNO
SMILES: CCCCCN(CC)C(=O)c1ccc(Cl)cc1
Mol. weight [g/mol]: 253.77

Physical Properties

Property code	Value	Unit	Source
gf	139.71	kJ/mol	Joback Method
hf	-168.02	kJ/mol	Joback Method
hfus	34.48	kJ/mol	Joback Method
hvap	62.87	kJ/mol	Joback Method
log10ws	-4.39		Crippen Method
logp	3.992		Crippen Method
mcvol	208.150	ml/mol	McGowan Method
pc	2025.41	kPa	Joback Method
rinpol	2070.00		NIST Webbook
rinpol	2070.00		NIST Webbook
tb	655.12	K	Joback Method
tc	859.15	K	Joback Method
tf	398.80	K	Joback Method
vc	0.784	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	534.59	J/mol×K	655.12	Joback Method
cpg	550.34	J/mol×K	689.13	Joback Method
cpg	565.12	J/mol×K	723.13	Joback Method
cpg	578.98	J/mol×K	757.14	Joback Method
cpg	591.97	J/mol×K	791.14	Joback Method
cpg	604.14	J/mol×K	825.15	Joback Method
cpg	615.52	J/mol×K	859.15	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U415325&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