Benzenemethanamine, 4-chloro-«alpha»-phenyl-

Other names: (4-Chlorophenyl)(phenyl)methanamine
p-Chlorobenzhydrylamine

Inchi: InChI=1S/C13H12ClN/c14-12-8-6-11(7-9-12)13(15)10-4-2-1-3-5-10/h1-9,13H,15H2

InchiKey: XAFODXGEQUOEKN-UHFFFAOYSA-N

Formula: C13H12ClN

SMILES: NC(c1ccccc1)c1ccc(Cl)cc1

Mol. weight [g/mol]: 217.69

CAS: 28022-43-7

Physical Properties

Property code	Value	Unit	Source
gf	325.85	kJ/mol	Joback Method
hf	162.71	kJ/mol	Joback Method
hfus	22.99	kJ/mol	Joback Method
hvap	64.38	kJ/mol	Joback Method
log10ws	-4.15		Crippen Method
logp	3.388		Crippen Method
mcvol	168.730	ml/mol	McGowan Method
pc	3117.52	kPa	Joback Method
tb	664.70	K	Joback Method
tc	925.98	K	Joback Method
tf	399.81	K	Joback Method
vc	0.620	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	409.88	J/mol×K	664.70	Joback Method
cpg	424.67	J/mol×K	708.25	Joback Method
cpg	438.15	J/mol×K	751.79	Joback Method
cpg	450.43	J/mol×K	795.34	Joback Method
cpg	461.58	J/mol×K	838.89	Joback Method
cpg	471.72	J/mol×K	882.43	Joback Method
cpg	480.92	J/mol×K	925.98	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C28022437&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume