Benzenamine, 4-cyclohexyl-

Other names:	Aniline, p-cyclohexyl-
	p-Cyclohexylaniline
	4-Cyclohexylaniline
Inchi:	InChI=1S/C12H17N/c13-12-8-6-11(7-9-12)10-4-2-1-3-5-10/h6-10H,1-5,13H2
InchiKey:	JLNMBIKJQAKQBH-UHFFFAOYSA-N
Formula:	C12H17N
SMILES:	Nc1ccc(C2CCCCC2)cc1
Mol. weight [g/mol]:	175.27
CAS:	6373-50-8

Physical Properties

Property code	Value	Unit	Source
gf	243.84	kJ/mol	Joback Method
hf	22.16	kJ/mol	Joback Method
hfus	17.52	kJ/mol	Joback Method
hvap	56.31	kJ/mol	Joback Method
log10ws	-3.44		Crippen Method
logp	3.316		Crippen Method
mcvol	155.300	ml/mol	McGowan Method
pc	3114.04	kPa	Joback Method
tb	597.70	K	Joback Method
tc	847.98	K	Joback Method
tf	354.58	K	Joback Method
vc	0.561	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	400.45	J/mol×K	597.70	Joback Method
cpg	420.35	J/mol×K	639.41	Joback Method
cpg	438.78	J/mol×K	681.13	Joback Method
cpg	455.79	J/mol×K	722.84	Joback Method
cpg	471.46	J/mol×K	764.56	Joback Method
cpg	485.86	J/mol×K	806.27	Joback Method

cpg	499.04	J/mol×K	847.98	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	439.20	K	1.70	NIST Webbook

Sources

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
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C6373508&Units=SI

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
tbrp: Boiling point at reduced pressure
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume

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