4-Methoxy-o-phenylenediamine

Other names:	4-Methoxy-1,2-diaminobenzene o-Phenylenediamine, 4-methoxy- 1,2-Benzenediamine, 4-methoxy- 3,4-Diaminoanisole
Inchi:	InChI=1S/C7H10N2O/c1-10-5-2-3-6(8)7(9)4-5/h2-4H,8-9H2,1H3
InchiKey:	AGAHETWGCFCMDK-UHFFFAOYSA-N
Formula:	C7H10N2O
SMILES:	COc1ccc(N)c(N)c1
Mol. weight [g/mol]:	138.17
CAS:	102-51-2

Physical Properties

Property code	Value	Unit	Source
gf	129.11	kJ/mol	Joback Method
hf	-38.86	kJ/mol	Joback Method
hfus	18.73	kJ/mol	Joback Method
hvap	58.47	kJ/mol	Joback Method
log10ws	-0.86		Crippen Method
logp	0.860		Crippen Method
mcvol	111.560	ml/mol	McGowan Method
pc	4492.23	kPa	Joback Method
tb	563.68	K	Joback Method
tc	800.40	K	Joback Method
tf	408.86	K	Joback Method
vc	0.396	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	258.94	J/mol×K	563.68	Joback Method
cpg	269.93	J/mol×K	603.13	Joback Method
cpg	280.29	J/mol×K	642.59	Joback Method
cpg	290.02	J/mol×K	682.04	Joback Method
cpg	299.14	J/mol×K	721.49	Joback Method

cpg	307.64	J/mol×K	760.95	Joback Method
cpg	315.52	J/mol×K	800.40	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C102512&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume