4-Chlorobenzenesulfonamide, N-methyl-

Other names: Benzenesulfonamide, 4-chloro-N-methyl-
4-Chloro-N-methylbenzenesulfonamide
Inchi: InChI=1S/C7H8ClNO2S/c1-9-12(10,11)7-4-2-6(8)3-5-7/h2-5,9H,1H3
InchiKey: PJHYEBDREIJPKX-UHFFFAOYSA-N
Formula: C7H8ClNO2S
SMILES: CNS(=O)(=O)c1ccc(Cl)cc1
Mol. weight [g/mol]: 205.66
CAS: 6333-79-5

Physical Properties

Property code	Value	Unit	Source
gf	-280.24	kJ/mol	Joback Method
hf	-378.37	kJ/mol	Joback Method
hfus	28.21	kJ/mol	Joback Method
hvap	63.57	kJ/mol	Joback Method
log10ws	-2.03		Crippen Method
logp	1.248		Crippen Method
mcvol	136.040	ml/mol	McGowan Method
pc	4802.50	kPa	Joback Method
rinpol	1744.00		NIST Webbook
rinpol	1744.00		NIST Webbook
tb	526.60	K	Joback Method
tc	741.48	K	Joback Method
tf	328.73	K	Joback Method
vc	0.529	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	276.79	J/mol×K	526.60	Joback Method
cpg	288.22	J/mol×K	562.41	Joback Method
cpg	298.96	J/mol×K	598.23	Joback Method
cpg	308.99	J/mol×K	634.04	Joback Method
cpg	318.33	J/mol×K	669.85	Joback Method

cpg	326.98	J/mol×K	705.66	Joback Method
cpg	334.97	J/mol×K	741.48	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C6333795&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume