Mafenide

Other names:	Benzenesulfonamide, 4-(aminomethyl)- «alpha»-Amino-p-toluenesulfonamide p-(Aminomethyl)benzenesulfonamide p-Toluenesulfonamide, «alpha»-amino- Ambamide Benzamsulfonamide Emilene Homonal Homosul Homosulfanilamide Malfamin Maphenid Maphenide Marprontil Mesudin Mesudrin Neofamid Paramenyl Septicid Sulfamylon 4-(Aminomethyl)benzenesulfonamide 4-Homosulfanilamide NSC-34632
Inchi:	InChI=1S/C7H10N2O2S/c8-5-6-1-3-7(4-2-6)12(9,10)11/h1-4H,5,8H2,(H2,9,10,11)
InchiKey:	TYMRLRRVMHJFTF-UHFFFAOYSA-N
Formula:	C7H10N2O2S
SMILES:	NCc1ccc(S(N)(=O)=O)cc1
Mol. weight [g/mol]:	186.23
CAS:	138-39-6

Physical Properties

Property code	Value	Unit	Source
gf	-224.80	kJ/mol	Joback Method
hf	-348.52	kJ/mol	Joback Method
hfus	29.31	kJ/mol	Joback Method
hvap	74.03	kJ/mol	Joback Method

log10ws	-1.48		Crippen Method
logp	-0.207		Crippen Method
mcvol	133.780	ml/mol	McGowan Method
pc	5871.90	kPa	Joback Method
tb	584.06	K	Joback Method
tc	812.58	K	Joback Method
tf	412.67	K	Joback Method
vc	0.503	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	314.34	J/mol×K	584.06	Joback Method
cpg	326.12	J/mol×K	622.15	Joback Method
cpg	337.07	J/mol×K	660.23	Joback Method
cpg	347.21	J/mol×K	698.32	Joback Method
cpg	356.55	J/mol×K	736.40	Joback Method
cpg	365.10	J/mol×K	774.49	Joback Method
cpg	372.87	J/mol×K	812.58	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C138396&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