Methanesulfonamide, N-ethyl-N-(3-methylphenyl)-

Inchi: InChI=1S/C10H15NO2S/c1-4-11(14(3,12)13)10-7-5-6-9(2)8-10/h5-8H,4H2,1-3H3
InchiKey: AAOXJWHSZYYKBZ-UHFFFAOYSA-N
Formula: C10H15NO2S
SMILES: CCN(c1cccc(C)c1)S(C)(=O)=O
Mol. weight [g/mol]: 213.30

Physical Properties

Property code	Value	Unit	Source
gf	-221.66	kJ/mol	Joback Method
hf	-410.49	kJ/mol	Joback Method
hfus	29.71	kJ/mol	Joback Method
hvap	61.47	kJ/mol	Joback Method
log10ws	-2.10		Crippen Method
logp	1.781		Crippen Method
mcvol	166.070	ml/mol	McGowan Method
pc	3423.86	kPa	Joback Method
rinpol	1602.00		NIST Webbook
tb	520.08	K	Joback Method
tc	717.06	K	Joback Method
tf	312.43	K	Joback Method
vc	0.631	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	370.65	J/mol×K	520.08	Joback Method
cpg	386.21	J/mol×K	552.91	Joback Method
cpg	400.93	J/mol×K	585.74	Joback Method
cpg	414.81	J/mol×K	618.57	Joback Method
cpg	427.88	J/mol×K	651.40	Joback Method
cpg	440.15	J/mol×K	684.23	Joback Method
cpg	451.64	J/mol×K	717.06	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U308429&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