Benzenesulfonamide, 4-methylcarbonyl-N,N-dimethyl-

Inchi: InChI=1S/C10H13NO3S/c1-8(12)9-4-6-10(7-5-9)15(13,14)11(2)3/h4-7H,1-3H3
InchiKey: JJTSRGOGIDQHGO-UHFFFAOYSA-N
Formula: C10H13NO3S
SMILES: CC(=O)c1ccc(S(=O)(=O)N(C)C)cc1
Mol. weight [g/mol]: 227.28

Physical Properties

Property code	Value	Unit	Source
gf	-350.58	kJ/mol	Joback Method
hf	-523.07	kJ/mol	Joback Method
hfus	31.31	kJ/mol	Joback Method
hvap	68.22	kJ/mol	Joback Method
log10ws	-1.80		Crippen Method
logp	1.140		Crippen Method
mcvol	167.640	ml/mol	McGowan Method
pc	3690.97	kPa	Joback Method
rinpol	1925.00		NIST Webbook
rinpol	1925.00		NIST Webbook
tb	573.95	K	Joback Method
tc	779.30	K	Joback Method
tf	362.36	K	Joback Method
vc	0.637	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	391.48	J/mol×K	573.95	Joback Method
cpg	405.72	J/mol×K	608.18	Joback Method
cpg	419.07	J/mol×K	642.40	Joback Method
cpg	431.56	J/mol×K	676.63	Joback Method
cpg	443.19	J/mol×K	710.85	Joback Method
cpg	453.99	J/mol×K	745.08	Joback Method
cpg	463.97	J/mol×K	779.30	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U374405&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

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