

2-Nitrobenzenesulfonamide

Other names:	2-Nitrobenzenesulphonamide
Inchi:	InChI=1S/C6H6N2O4S/c7-13(11,12)6-4-2-1-3-5(6)8(9)10/h1-4H,(H2,7,11,12)
InchiKey:	GNDKYAWHEKZHPJ-UHFFFAOYSA-N
Formula:	C6H6N2O4S
SMILES:	NS(=O)(=O)c1ccccc1[N+](=O)[O-]
Mol. weight [g/mol]:	202.19
CAS:	5455-59-4

Physical Properties

Property code	Value	Unit	Source
gf	-264.12	kJ/mol	Joback Method
hf	-372.43	kJ/mol	Joback Method
hfus	32.88	kJ/mol	Joback Method
hvap	77.76	kJ/mol	Joback Method
log10ws	-1.82		Crippen Method
logp	0.242		Crippen Method
mcvol	127.130	ml/mol	McGowan Method
pc	6359.24	kPa	Joback Method
tb	640.49	K	Joback Method
tc	890.70	K	Joback Method
tf	461.75	K	Joback Method
vc	0.500	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	301.69	J/molxK	640.49	Joback Method
cpg	311.72	J/molxK	682.19	Joback Method
cpg	320.82	J/molxK	723.89	Joback Method
cpg	329.01	J/molxK	765.59	Joback Method
cpg	336.31	J/molxK	807.30	Joback Method
cpg	342.72	J/molxK	849.00	Joback Method
cpg	348.26	J/molxK	890.70	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C5455594&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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
hvp:	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

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