Benzenesulfonic acid, 4-hydroxy-

Other names:	Benzenesulfonic acid, p-hydroxy-
	p-Hydroxybenzenesulfonic acid
	p-Phenolsulfonic acid
	p-Sulfophenol
	Hydroxybenzene-4-sulfonic acid
	4-Hydroxybenzenesulfonic acid
	4-Phenolsulfonic acid
	4-Hydroxyphenylsulfonic acid
	p-Hydroxybenzenesulphonic acid
	NSC 227908
	4-hydroxybenzenesulphonic acid
Inchi:	InChI=1S/C6H6O4S/c7-5-1-3-6(4-2-5)11(8,9)10/h1-4,7H,(H,8,9,10)
InchiKey:	FEPBITJSIHRMRT-UHFFFAOYSA-N
Formula:	C6H6O4S
SMILES:	O=S(=O)(O)c1ccc(O)cc1
Mol. weight [g/mol]:	174.17
CAS:	98-67-9

Physical Properties

Property code	Value	Unit	Source
gf	-647.93	kJ/mol	Joback Method
hf	-713.53	kJ/mol	Joback Method
hfus	26.59	kJ/mol	Joback Method
hvap	79.55	kJ/mol	Joback Method
log10ws	-0.61		Crippen Method
logp	0.639		Crippen Method
mcvol	111.470	ml/mol	McGowan Method
pc	8783.57	kPa	Joback Method
tb	583.94	K	Joback Method
tc	792.32	K	Joback Method
tf	394.90	K	Joback Method
vc	0.374	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	255.58	J/mol×K	583.94	Joback Method
cpg	263.54	J/mol×K	618.67	Joback Method
cpg	270.90	J/mol×K	653.40	Joback Method
cpg	277.70	J/mol×K	688.13	Joback Method
cpg	283.99	J/mol×K	722.86	Joback Method
cpg	289.80	J/mol×K	757.59	Joback Method
cpg	295.19	J/mol×K	792.32	Joback Method

Sources

Joback Method: https://en.wikipedia.org/wiki/Joback_method
McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C98679&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

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