2,5-Cyclohexadiene-1,4-dione, 2,5-dihydroxy-

Other names: p-Benzoquinone, 2,5-dihydroxy-
2,5-Dihydroxy-p-benzoquinone
2,5-Dihydroxy-1,4-benzoquinone
2,5-Dihyroxy-p-benzoquinone
2,5-Dihydroxybenzoquinone
Inchi: InChI=1S/C6H4O4/c7-3-1-4(8)6(10)2-5(3)9/h1-2,7,10H
InchiKey: QFSYADJLNBHAKO-UHFFFAOYSA-N
Formula: C6H4O4
SMILES: O=C1C=C(O)C(=O)C=C1O
Mol. weight [g/mol]: 140.09
CAS: 615-94-1

Physical Properties

Property code	Value	Unit	Source
gf	-446.36	kJ/mol	Joback Method
hf	-579.75	kJ/mol	Joback Method
hfus	10.92	kJ/mol	Joback Method
hvap	73.45	kJ/mol	Joback Method
log10ws	-0.13		Crippen Method
logp	0.022		Crippen Method
mcvol	90.820	ml/mol	McGowan Method
pc	6298.82	kPa	Joback Method
tb	689.18	K	Joback Method
tc	903.55	K	Joback Method
tf	453.64	K	Joback Method
vc	0.330	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	228.17	J/mol×K	689.18	Joback Method
cpg	235.56	J/mol×K	724.91	Joback Method
cpg	242.50	J/mol×K	760.64	Joback Method
cpg	248.95	J/mol×K	796.36	Joback Method

cpg	254.85	J/mol×K	832.09	Joback Method
cpg	260.19	J/mol×K	867.82	Joback Method
cpg	264.90	J/mol×K	903.55	Joback Method

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C615941&Units=SI

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