Durohydroquinone

Other names:	Dihydroxydurene
	Duro-p-hydroquinone
	Hydroquinone, tetramethyl-
	Tetramethylhydroquinone
	1,4-Benzenediol, 2,3,5,6-tetramethyl-
	2,3,5,6-Tetramethylhydroquinone
Inchi:	InChI=1S/C10H14O2/c1-5-6(2)10(12)8(4)7(3)9(5)11/h11-12H,1-4H3
InchiKey:	SUNVJLYYDZCIIK-UHFFFAOYSA-N
Formula:	C10H14O2
SMILES:	Cc1c(C)c(O)c(C)c(C)c1O
Mol. weight [g/mol]:	166.22
CAS:	527-18-4

Physical Properties

Property code	Value	Unit	Source
gf	-192.40	kJ/mol	Joback Method
hf	-402.23	kJ/mol	Joback Method
hfus	26.10	kJ/mol	Joback Method
hvap	68.14	kJ/mol	Joback Method
ie	7.48 ± 0.05	eV	NIST Webbook
log10ws	-2.47		Crippen Method
logp	2.331		Crippen Method
mcvol	139.740	ml/mol	McGowan Method
pc	3935.71	kPa	Joback Method
tb	631.06	K	Joback Method
tc	862.85	K	Joback Method
tf	489.88	K	Joback Method
vc	0.419	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	357.54	J/mol×K	631.06	Joback Method
cpg	368.95	J/mol×K	669.69	Joback Method

cpg	379.74	J/mol×K	708.32	Joback Method
cpg	390.01	J/mol×K	746.96	Joback Method
cpg	399.87	J/mol×K	785.59	Joback Method
cpg	409.45	J/mol×K	824.22	Joback Method
cpg	418.84	J/mol×K	862.85	Joback Method
dvisc	0.0000711	Pa×s	489.88	Joback Method
dvisc	0.0000400	Pa×s	513.41	Joback Method
dvisc	0.0000236	Pa×s	536.94	Joback Method
dvisc	0.0000146	Pa×s	560.47	Joback Method
dvisc	0.0000094	Pa×s	584.00	Joback Method
dvisc	0.0000062	Pa×s	607.53	Joback Method
dvisc	0.0000043	Pa×s	631.06	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=C527184&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
dvisc:	Dynamic viscosity
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
ie:	Ionization energy
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