2,3-Naphthalenediol

Other names:	Naphthalene-2,3-diol
	2,3-Dihydroxynapthalene
	2,3-Dihydroxynaphthalene
	Naphthalenediol-(2,3)
Inchi:	InChI=1S/C10H8O2/c11-9-5-7-3-1-2-4-8(7)6-10(9)12/h1-6,11-12H
InchiKey:	JRNGUTKWMSBIBF-UHFFFAOYSA-N
Formula:	C10H8O2
SMILES:	Oc1cc2ccccc2cc1O
Mol. weight [g/mol]:	160.17
CAS:	92-44-4

Physical Properties

Property code	Value	Unit	Source
chs	-4761.97 ± 0.67	kJ/mol	NIST Webbook
chs	-4776.00 ± 1.10	kJ/mol	NIST Webbook
gf	-56.86	kJ/mol	Joback Method
hf	-207.00 ± 1.60	kJ/mol	NIST Webbook
hf	-192.80 ± 2.00	kJ/mol	NIST Webbook
hfs	-302.40 ± 1.70	kJ/mol	NIST Webbook
hfs	-316.40 ± 1.50	kJ/mol	NIST Webbook
hfus	24.28	kJ/mol	Joback Method
hsub	109.40 ± 0.50	kJ/mol	NIST Webbook
hsub	109.40	kJ/mol	NIST Webbook
hsub	109.60 ± 1.00	kJ/mol	NIST Webbook
hsub	109.60	kJ/mol	NIST Webbook
hsub	109.60 ± 1.00	kJ/mol	NIST Webbook
hvap	67.80	kJ/mol	Joback Method
log10ws	-2.37		Crippen Method
logp	2.251		Crippen Method
mcvol	120.280	ml/mol	McGowan Method
pc	5880.91	kPa	Joback Method
ss	192.00	J/mol×K	NIST Webbook
tb	635.10	K	Joback Method
tc	895.57	K	Joback Method
tf	485.02	K	Joback Method
vc	0.342	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	349.82	J/mol×K	895.57	Joback Method
cpg	341.88	J/mol×K	852.16	Joback Method
cpg	334.05	J/mol×K	808.75	Joback Method
cpg	326.08	J/mol×K	765.34	Joback Method
cpg	317.75	J/mol×K	721.92	Joback Method
cpg	308.81	J/mol×K	678.51	Joback Method
cpg	299.04	J/mol×K	635.10	Joback Method
dvisc	0.0001338	Pa×s	485.02	Joback Method
dvisc	0.0000071	Pa×s	635.10	Joback Method
dvisc	0.0000105	Pa×s	610.09	Joback Method
dvisc	0.0000161	Pa×s	585.07	Joback Method
dvisc	0.0000254	Pa×s	560.06	Joback Method
dvisc	0.0000420	Pa×s	535.05	Joback Method
dvisc	0.0000728	Pa×s	510.03	Joback Method
hsubt	109.40 ± 0.50	kJ/mol	350.00	NIST Webbook

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=C92444&Units=SI

Legend

chs: Standard solid enthalpy of combustion
cpg: Ideal gas heat capacity
dvisc: Dynamic viscosity
gf: Standard Gibbs free energy of formation
hf: Enthalpy of formation at standard conditions

hfs:	Solid phase enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hsub:	Enthalpy of sublimation at standard conditions
hsubt:	Enthalpy of sublimation at a given temperature
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
ss:	Solid phase molar entropy at standard conditions
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume