1-Naphthalenecarboxaldehyde, 2-hydroxy-

Other names:	1-Naphthaldehyde, 2-hydroxy- «beta»-Hydroxy-«alpha»-naphthaldehyde 1-Hydroxy-2-naphthalenecarboxaldehyde 2-Hydroxy-«alpha»-naphthaldehyde 2-Hydroxy-1-naphthalaldehyde 2-Hydroxy-1-naphthaldehyde 2-Hydroxy-1-naphthalenecarboxaldehyde 2-Hydroxy-1-naphthylaldehyde 2-Hydroxy-1-napthaldehyde 2-Hydroxynaphthaldehyde 2-Naphthol 1-carboxaldehyde 2-Hydroxy-1-naphthalenealdehyde 1-Formyl-2-naphthol «beta»-Hydroxynaphthaldehyde 1-Formyl-2-hydroxy-naphthalene NSC 2104
Inchi:	InChI=1S/C11H8O2/c12-7-10-9-4-2-1-3-8(9)5-6-11(10)13/h1-7,13H
InchiKey:	NTCCNERMXRIPTR-UHFFFAOYSA-N
Formula:	C11H8O2
SMILES:	O=Cc1c(O)ccc2ccccc12
Mol. weight [g/mol]:	172.18
CAS:	708-06-5

Physical Properties

Property code	Value	Unit	Source
gf	-2.97	kJ/mol	Joback Method
hf	-117.13	kJ/mol	Joback Method
hfus	22.99	kJ/mol	Joback Method
hvap	64.39	kJ/mol	Joback Method
log10ws	-3.07		Crippen Method
logp	2.358		Crippen Method
mcvol	130.070	ml/mol	McGowan Method
pc	4504.30	kPa	Joback Method
tb	631.00	K	Joback Method
tc	878.73	K	Joback Method
tf	439.09	K	Joback Method
vc	0.449	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	313.19	J/mol×K	631.00	Joback Method
cpg	323.68	J/mol×K	672.29	Joback Method
cpg	333.30	J/mol×K	713.58	Joback Method
cpg	342.19	J/mol×K	754.86	Joback Method
cpg	350.50	J/mol×K	796.15	Joback Method
cpg	358.36	J/mol×K	837.44	Joback Method
cpg	365.92	J/mol×K	878.73	Joback Method
dvisc	0.0007964	Pa×s	439.09	Joback Method
dvisc	0.0004469	Pa×s	471.08	Joback Method
dvisc	0.0002699	Pa×s	503.06	Joback Method
dvisc	0.0001731	Pa×s	535.05	Joback Method
dvisc	0.0001168	Pa×s	567.03	Joback Method
dvisc	0.0000821	Pa×s	599.01	Joback Method
dvisc	0.0000599	Pa×s	631.00	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	465.20	K	3.60	NIST Webbook

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=C708065&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
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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume