2-Naphthalenecarboxylic acid, 3-hydroxy-

Other names:	2-Hydroxy-3-naphthalenecarboxylic acid
	2-Hydroxy-3-naphthoic acid
	2-Hydroxy-3-napthoic acid
	2-Naphthol-3-carboxylic acid
	2-naphthoic acid, 3-hydroxy-
	3-Hydroxy-2-naphthalenecarboxylic acid
	3-Hydroxy-«beta»-naphthoic acid
	3-Hydroxynaphthalene-2-carboxylic acid
	3-Hydroxynaphthalenecarboxylic acid-(2)
	3-Naphthol-2-carboxylic acid
	3-hydroxy-2-naphthoic acid
	B.O.N. acid
	BON
	BON Acid
	BONA
	C.I. Developer 20
	C.I. Developer 8
	Developer BON
	Kyselina 3-hydroxy-2-naftoova
	Miketazol Developer ONS
	NSC 3719
	Naphthol B.O.N.
	«beta»-Hydroxynaphthoic acid
	«beta»-Oxynaphthoic acid
Inchi:	InChI=1S/C11H8O3/c12-10-6-8-4-2-1-3-7(8)5-9(10)11(13)14/h1-6,12H,(H,13,14)
InchiKey:	ALKYHXVLJMQRLQ-UHFFFAOYSA-N
Formula:	C11H8O3
SMILES:	O=C(O)c1cc2ccccc2cc1O
Mol. weight [g/mol]:	188.18
CAS:	92-70-6

Physical Properties

Property code	Value	Unit	Source
chs	-4924.15 ± 0.84	kJ/mol	NIST Webbook
chs	-4949.50 ± 0.50	kJ/mol	NIST Webbook
gf	-169.19	kJ/mol	Joback Method

hf	-296.36	kJ/mol	Joback Method
hfs	-522.40	kJ/mol	NIST Webbook
hfus	26.39	kJ/mol	Joback Method
hvap	81.10	kJ/mol	Joback Method
log10ws	-2.88		Crippen Method
logp	2.244		Crippen Method
mcvol	135.940	ml/mol	McGowan Method
pc	5037.07	kPa	Joback Method
tb	728.39	K	Joback Method
tc	959.41	K	Joback Method
tf	507.84	K	Joback Method
tt	494.40	K	Measurement and Correlation of Solubility of 3-Hydroxy-2-naphthoic Acid in Ten Pure and Binary Mixed Organic Solvents from T = (293.15 to 333.15 K)
vc	0.457	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	351.94	J/mol×K	728.39	Joback Method
cpg	360.37	J/mol×K	766.89	Joback Method
cpg	368.28	J/mol×K	805.40	Joback Method
cpg	375.80	J/mol×K	843.90	Joback Method
cpg	383.03	J/mol×K	882.40	Joback Method
cpg	390.10	J/mol×K	920.91	Joback Method
cpg	397.12	J/mol×K	959.41	Joback Method
dvisc	0.0002246	Pa×s	507.84	Joback Method
dvisc	0.0001080	Pa×s	544.60	Joback Method
dvisc	0.0000570	Pa×s	581.36	Joback Method
dvisc	0.0000324	Pa×s	618.12	Joback Method
dvisc	0.0000197	Pa×s	654.87	Joback Method
dvisc	0.0000126	Pa×s	691.63	Joback Method
dvisc	0.0000084	Pa×s	728.39	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=C92706&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Measurement and Correlation of Solubility of 3-Hydroxy-2-naphthoic Acid in Ten Pure and Binary Mixed Organic Solvents from T = (293.15 to 333.15 K):	https://www.doi.org/10.1021/acs.jced.8b00578

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
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
tt:	Triple Point Temperature
vc:	Critical Volume