2-Naphthalenecarboxylic acid, 3-hydroxy-, phenyl ester

Other names: 2-Naphthoic acid, 3-hydroxy-, phenyl ester
Phenyl 3-hydroxy-2-naphthoate
Phenyl-2-hydroxy-3-naphthoate

Inchi: InChI=1S/C17H12O3/c18-16-11-13-7-5-4-6-12(13)10-15(16)17(19)20-14-8-2-1-3-9-14/h1

InchiKey: SRMZHGJLSDITLO-UHFFFAOYSA-N

Formula: C17H12O3

SMILES: O=C(Oc1ccccc1)c1cc2ccccc2cc1O

Mol. weight [g/mol]: 264.28

CAS: 7260-11-9

Physical Properties

Property code	Value	Unit	Source
gf	25.56	kJ/mol	Joback Method
hf	-163.66	kJ/mol	Joback Method
hfus	33.07	kJ/mol	Joback Method
hvap	82.46	kJ/mol	Joback Method
log10ws	-4.91		Crippen Method
logp	3.765		Crippen Method
mcvol	196.720	ml/mol	McGowan Method
pc	3217.33	kPa	Joback Method
tb	822.59	K	Joback Method
tc	1084.86	K	Joback Method
tf	563.29	K	Joback Method
vc	0.683	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	548.23	J/mol×K	822.59	Joback Method
cpg	560.87	J/mol×K	866.30	Joback Method
cpg	572.72	J/mol×K	910.01	Joback Method
cpg	583.97	J/mol×K	953.73	Joback Method
cpg	594.81	J/mol×K	997.44	Joback Method
cpg	605.43	J/mol×K	1041.15	Joback Method

cpg	615.99	J/mol×K	1084.86	Joback Method
dvisc	0.0001463	Pa×s	563.29	Joback Method
dvisc	0.0000827	Pa×s	606.51	Joback Method
dvisc	0.0000504	Pa×s	649.72	Joback Method
dvisc	0.0000327	Pa×s	692.94	Joback Method
dvisc	0.0000223	Pa×s	736.16	Joback Method
dvisc	0.0000159	Pa×s	779.37	Joback Method
dvisc	0.0000117	Pa×s	822.59	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	532.20	K	21.30	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=C7260119&Units=SI

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