Naphthalene, 2-hydroxy-6-benzoyl-

Other names:	6-Benzoyl-2-naphthol
	Methanone, (6-hydroxy-2-naphthalenyl) phenyl
	Ketone, 6-hydroxy-2-naphthyl phenyl
	6-hydroxy-2-naphthyl phenyl ketone
Inchi:	InChI=1S/C17H12O2/c18-16-9-8-13-10-15(7-6-14(13)11-16)17(19)12-4-2-1-3-5-12/h1-11
InchiKey:	MJKZGSBXCWNUHV-UHFFFAOYSA-N
Formula:	C17H12O2
SMILES:	O=C(c1ccccc1)c1ccc2cc(O)ccc2c1
Mol. weight [g/mol]:	248.28
CAS:	52222-87-4

Physical Properties

Property code	Value	Unit	Source
gf	130.56	kJ/mol	Joback Method
hf	-31.44	kJ/mol	Joback Method
hfus	31.88	kJ/mol	Joback Method
hvap	80.05	kJ/mol	Joback Method
log10ws	-4.78		Crippen Method
logp	3.776		Crippen Method
mcvol	190.850	ml/mol	McGowan Method
pc	3280.28	kPa	Joback Method
tb	800.17	K	Joback Method
tc	1067.14	K	Joback Method
tf	541.06	K	Joback Method
vc	0.665	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	523.47	J/mol×K	800.17	Joback Method
cpg	536.43	J/mol×K	844.66	Joback Method
cpg	548.61	J/mol×K	889.16	Joback Method
cpg	560.21	J/mol×K	933.65	Joback Method
cpg	571.47	J/mol×K	978.15	Joback Method

cpg	582.60	J/mol×K	1022.64	Joback Method
cpg	593.84	J/mol×K	1067.14	Joback Method
dvisc	0.0002242	Pa×s	541.06	Joback Method
dvisc	0.0001231	Pa×s	584.25	Joback Method
dvisc	0.0000734	Pa×s	627.43	Joback Method
dvisc	0.0000468	Pa×s	670.62	Joback Method
dvisc	0.0000315	Pa×s	713.80	Joback Method
dvisc	0.0000222	Pa×s	756.99	Joback Method
dvisc	0.0000162	Pa×s	800.17	Joback Method

Sources

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=C52222874&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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