1-(2-Hydroxyphenyl)-3-phenyl-1-propanone

Other names:	2'-Hydroxy-3-phenylpropiophenone
	o-Hydroxy-«beta»-phenyl propiophenone
	1-Propanone, 1-(2-hydroxyphenyl)-2-phenyl-
	PROPAFENONE-H2O, M(O-DESALKYL-)
Inchi:	InChI=1S/C15H14O2/c16-14-9-5-4-8-13(14)15(17)11-10-12-6-2-1-3-7-12/h1-9,16H,10-11
InchiKey:	JCPGMXJLFWGRMZ-UHFFFAOYSA-N
Formula:	C15H14O2
SMILES:	O=C(CCc1ccccc1)c1ccccc1O
Mol. weight [g/mol]:	226.27
CAS:	42772-82-7

Physical Properties

Property code	Value	Unit	Source
gf	16.70	kJ/mol	Joback Method
hf	-169.76	kJ/mol	Joback Method
hfus	30.07	kJ/mol	Joback Method
hvap	73.30	kJ/mol	Joback Method
log10ws	-3.71		Crippen Method
logp	3.208		Crippen Method
mcvol	182.130	ml/mol	McGowan Method
pc	3142.03	kPa	Joback Method
rinpol	1830.00		NIST Webbook
tb	730.45	K	Joback Method
tc	979.09	K	Joback Method
tf	473.30	K	Joback Method
vc	0.631	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	491.41	J/mol×K	730.45	Joback Method
cpg	505.34	J/mol×K	771.89	Joback Method
cpg	518.25	J/mol×K	813.33	Joback Method
cpg	530.28	J/mol×K	854.77	Joback Method

cpg	541.57	J/mol×K	896.21	Joback Method
cpg	552.27	J/mol×K	937.65	Joback Method
cpg	562.53	J/mol×K	979.09	Joback Method
dvisc	0.0004041	Pa×s	473.30	Joback Method
dvisc	0.0001820	Pa×s	516.16	Joback Method
dvisc	0.0000926	Pa×s	559.02	Joback Method
dvisc	0.0000519	Pa×s	601.88	Joback Method
dvisc	0.0000314	Pa×s	644.73	Joback Method
dvisc	0.0000202	Pa×s	687.59	Joback Method
dvisc	0.0000137	Pa×s	730.45	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=C42772827&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
rinpol: Non-polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume

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