Methanone, (2-hydroxyphenyl)phenyl-

Other names:	Benzophenone, 2-hydroxy- o-Benzoylphenol o-Hydroxybenzophenone Phenyl 2-hydroxyphenyl ketone 2-Hydroxybenzophenone ortho-Hydroxybenzophenone (2-Hydroxyphenyl)phenylmethanone NSC 623
Inchi:	InChI=1S/C13H10O2/c14-12-9-5-4-8-11(12)13(15)10-6-2-1-3-7-10/h1-9,14H
InchiKey:	HJIAMFHSAAEUKR-UHFFFAOYSA-N
Formula:	C13H10O2
SMILES:	O=C(c1ccccc1)c1ccccc1O
Mol. weight [g/mol]:	198.22
CAS:	117-99-7

Physical Properties

Property code	Value	Unit	Source
gf	-0.14	kJ/mol	Joback Method
hf	-128.48	kJ/mol	Joback Method
hfus	24.89	kJ/mol	Joback Method
hvap	68.84	kJ/mol	Joback Method
log10ws	-2.98		Crippen Method
logp	2.623		Crippen Method
mcvol	153.950	ml/mol	McGowan Method
pc	3945.61	kPa	Joback Method
tb	684.69	K	Joback Method
tc	945.04	K	Joback Method
tf	308.00 ± 3.00	K	NIST Webbook
vc	0.519	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	389.74	J/mol×K	684.69	Joback Method

cpg	402.55	J/mol×K	728.08	Joback Method
cpg	414.27	J/mol×K	771.47	Joback Method
cpg	425.07	J/mol×K	814.86	Joback Method
cpg	435.10	J/mol×K	858.25	Joback Method
cpg	444.52	J/mol×K	901.65	Joback Method
cpg	453.47	J/mol×K	945.04	Joback Method
dvisc	0.0005613	Pa×s	450.76	Joback Method
dvisc	0.0002598	Pa×s	489.75	Joback Method
dvisc	0.0001348	Pa×s	528.74	Joback Method
dvisc	0.0000765	Pa×s	567.72	Joback Method
dvisc	0.0000467	Pa×s	606.71	Joback Method
dvisc	0.0000303	Pa×s	645.70	Joback Method
dvisc	0.0000206	Pa×s	684.69	Joback Method
hfust	0.67	kJ/mol	308.20	NIST Webbook

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	445.20	K	1.60	NIST Webbook
tbrp	523.20	K	74.70	NIST Webbook

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C117997&Units=SI
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

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
hfust:	Enthalpy of fusion at a given temperature
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