Methanone, (4-bromophenyl)phenyl-

Other names:	Benzophenone, 4-bromo- p-Bromobenzophenone 4-Bromobenzophenone USAF do-3
Inchi:	InChI=1S/C13H9BrO/c14-12-8-6-11(7-9-12)13(15)10-4-2-1-3-5-10/h1-9H
InchiKey:	KEOLYBMGRQYQTN-UHFFFAOYSA-N
Formula:	C13H9BrO
SMILES:	O=C(c1ccccc1)c1ccc(Br)cc1
Mol. weight [g/mol]:	261.11
CAS:	90-90-4

Physical Properties

Property code	Value	Unit	Source
gf	159.17	kJ/mol	Joback Method
hf	63.69	kJ/mol	Joback Method
hfus	24.00	kJ/mol	Joback Method
hvap	62.93	kJ/mol	Joback Method
log10ws	-4.59		Crippen Method
logp	3.680		Crippen Method
mcvol	165.580	ml/mol	McGowan Method
pc	3513.74	kPa	Joback Method
rinpol	1841.00		NIST Webbook
rinpol	1841.00		NIST Webbook
tb	623.20	K	NIST Webbook
tb	623.00	K	NIST Webbook
tc	940.54	K	Joback Method
tf	355.60	K	NIST Webbook
vc	0.616	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	376.17	J/mol×K	675.21	Joback Method
cpg	430.37	J/mol×K	896.32	Joback Method

cpg	421.56	J/mol×K	852.10	Joback Method
cpg	411.84	J/mol×K	807.88	Joback Method
cpg	401.10	J/mol×K	763.65	Joback Method
cpg	389.24	J/mol×K	719.43	Joback Method
cpg	438.36	J/mol×K	940.54	Joback Method
dvisc	0.0001985	Pa×s	675.21	Joback Method
dvisc	0.0002460	Pa×s	631.24	Joback Method
dvisc	0.0003149	Pa×s	587.26	Joback Method
dvisc	0.0004195	Pa×s	543.29	Joback Method
dvisc	0.0005878	Pa×s	499.31	Joback Method
dvisc	0.0008791	Pa×s	455.34	Joback Method
dvisc	0.0014329	Pa×s	411.36	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=C90904&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