Ethanone, 1-[1,1'-biphenyl]-4-yl-2-bromo-

Other names:	Acetophenone, 2-bromo-4'-phenyl-
	«alpha»-Bromo-p-phenylacetophenone
	«omega»-Bromo-4-phenylacetophenone
	p-Phenylphenacyl bromide
	Bromomethyl p-biphenylyl ketone
	2-Bromo-4'-phenylacetophenone
	4-Phenylphenacyl bromide
	«alpha»-Bromo-4-phenylacetophenone
	p-Phenyl-«alpha»-bromoacetophenone
	p-Bromoacetylbiphenyl
	Acetophenone, alpha-bromo-p-phenyl-
	1-Biphenyl-4-yl-2-bromoethanone
	NSC 37117
	biphenyl-4-yl bromomethyl ketone
Inchi:	InChI=1S/C14H11BrO/c15-10-14(16)13-8-6-12(7-9-13)11-4-2-1-3-5-11/h1-9H,10H2
InchiKey:	KGHGZRVXCKCJGX-UHFFFAOYSA-N
Formula:	C14H11BrO
SMILES:	O=C(CBr)c1ccc(-c2ccccc2)cc1
Mol. weight [g/mol]:	275.14
CAS:	135-73-9

Physical Properties

Property code	Value	Unit	Source
gf	167.59	kJ/mol	Joback Method
hf	43.05	kJ/mol	Joback Method
hfus	26.59	kJ/mol	Joback Method
hvap	65.15	kJ/mol	Joback Method
log10ws	-5.17		Crippen Method
logp	3.931		Crippen Method
mcvol	179.670	ml/mol	McGowan Method
pc	3145.56	kPa	Joback Method
tb	698.09	K	Joback Method
tc	957.04	K	Joback Method
tf	422.63	K	Joback Method
vc	0.671	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	426.04	J/mol×K	698.09	Joback Method
cpg	439.70	J/mol×K	741.25	Joback Method
cpg	452.15	J/mol×K	784.41	Joback Method
cpg	463.48	J/mol×K	827.56	Joback Method
cpg	473.80	J/mol×K	870.72	Joback Method
cpg	483.20	J/mol×K	913.88	Joback Method
cpg	491.77	J/mol×K	957.04	Joback Method
dvisc	0.0013511	Pa×s	422.63	Joback Method
dvisc	0.0008160	Pa×s	468.54	Joback Method
dvisc	0.0005392	Pa×s	514.45	Joback Method
dvisc	0.0003813	Pa×s	560.36	Joback Method
dvisc	0.0002842	Pa×s	606.27	Joback Method
dvisc	0.0002208	Pa×s	652.18	Joback Method
dvisc	0.0001773	Pa×s	698.09	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=C135739&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