

1-Propanone, 2-bromo-1-phenyl-

Other names:	1-Benzoyl-1-bromoethane «alpha»-Bromoethyl phenyl ketone 1-Bromoethyl phenyl ketone «alpha»-Bromopropiophenone 2-Bromopropiophenone «alpha»-Methylphenacyl bromide Propiophenone, 2-bromo- alpha-Bromopropiophenone TL 336 NSC 89689
Inchi:	InChI=1S/C9H9BrO/c1-7(10)9(11)8-5-3-2-4-6-8/h2-7H,1H3
InchiKey:	WPDWOCRJBPXJFM-UHFFFAOYSA-N
Formula:	C9H9BrO
SMILES:	CC(Br)C(=O)c1ccccc1
Mol. weight [g/mol]:	213.07
CAS:	2114-00-3

Physical Properties

Property code	Value	Unit	Source
gf	20.27	kJ/mol	Joback Method
hf	-84.09	kJ/mol	Joback Method
hfus	16.47	kJ/mol	Joback Method
hvap	50.70	kJ/mol	Joback Method
log10ws	-3.09		Crippen Method
logp	2.653		Crippen Method
mcvol	132.980	ml/mol	McGowan Method
pc	3853.09	kPa	Joback Method
tb	520.70	K	NIST Webbook
tc	790.80	K	Joback Method
tf	312.34	K	Joback Method
vc	0.493	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	270.02	J/mol×K	551.59	Joback Method
cpg	322.45	J/mol×K	750.94	Joback Method
cpg	313.61	J/mol×K	711.07	Joback Method
cpg	304.01	J/mol×K	671.20	Joback Method
cpg	293.58	J/mol×K	631.33	Joback Method
cpg	282.27	J/mol×K	591.46	Joback Method
cpg	330.58	J/mol×K	790.80	Joback Method
dvisc	0.0002837	Paxs	551.59	Joback Method
dvisc	0.0003638	Paxs	511.72	Joback Method
dvisc	0.0004866	Paxs	471.84	Joback Method
dvisc	0.0006866	Paxs	431.97	Joback Method
dvisc	0.0010391	Paxs	392.09	Joback Method
dvisc	0.0017274	Paxs	352.22	Joback Method
dvisc	0.0032693	Paxs	312.34	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=C2114003&Units=SI>

Crippen Method:

<http://pubs.acs.org/doi/abs/10.1021/ci9903071>

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
mccvol:	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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