Hydrazine, 1-benzoyl-2-(m-bromobenzoyl)-

Inchi: InChI=1S/C14H11BrN2O2/c15-12-8-4-7-11(9-12)14(19)17-16-13(18)10-5-2-1-3-6-10/h1-
InchiKey: PUNMNEKYOYAYSP-UHFFFAOYSA-N
Formula: C14H11BrN2O2
SMILES: O=C(NNC(=O)c1cccc(Br)c1)c1ccccc1
Mol. weight [g/mol]: 319.15
CAS: 73713-56-1

Physical Properties

Property code	Value	Unit	Source
gf	217.45	kJ/mol	Joback Method
hf	37.41	kJ/mol	Joback Method
hfus	38.39	kJ/mol	Joback Method
hvap	84.77	kJ/mol	Joback Method
log10ws	-5.13		Crippen Method
logp	2.524		Crippen Method
mcvol	201.200	ml/mol	McGowan Method
pc	3484.76	kPa	Joback Method
tb	852.30	K	Joback Method
tc	1107.60	K	Joback Method
tf	577.88	K	Joback Method
vc	0.748	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	530.86	J/mol×K	852.30	Joback Method
cpg	541.13	J/mol×K	894.85	Joback Method
cpg	550.39	J/mol×K	937.40	Joback Method
cpg	558.75	J/mol×K	979.95	Joback Method
cpg	566.30	J/mol×K	1022.50	Joback Method
cpg	573.15	J/mol×K	1065.05	Joback Method
cpg	579.40	J/mol×K	1107.60	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=C73713561&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg:	Ideal gas heat capacity
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