

2-Fluorobenzoic acid, 2-bromo-4-fluorophenyl ester

Inchi:	InChI=1S/C13H7BrF2O2/c14-10-7-8(15)5-6-12(10)18-13(17)9-3-1-2-4-11(9)16/h1-7H
InchiKey:	BIBXGCWPGJSIFS-UHFFFAOYSA-N
Formula:	C13H7BrF2O2
SMILES:	O=C(Oc1ccc(F)cc1Br)c1ccccc1F
Mol. weight [g/mol]:	313.09

Physical Properties

Property code	Value	Unit	Source
gf	-354.71	kJ/mol	Joback Method
hf	-483.69	kJ/mol	Joback Method
hfus	30.57	kJ/mol	Joback Method
hvap	65.03	kJ/mol	Joback Method
log10ws	-5.38		Crippen Method
logp	3.947		Crippen Method
mcvol	174.990	ml/mol	McGowan Method
pc	3005.73	kPa	Joback Method
rinqol	1825.00		NIST Webbook
tb	706.13	K	Joback Method
tc	944.68	K	Joback Method
tf	459.81	K	Joback Method
vc	0.669	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	412.69	J/mol×K	706.13	Joback Method
cpg	423.80	J/mol×K	745.89	Joback Method
cpg	433.98	J/mol×K	785.65	Joback Method
cpg	443.28	J/mol×K	825.41	Joback Method
cpg	451.73	J/mol×K	865.16	Joback Method
cpg	459.37	J/mol×K	904.92	Joback Method
cpg	466.23	J/mol×K	944.68	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U299047&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
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

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