

3-Chloro-2-fluorobenzoic acid, 3-methylbutyl ester

Inchi:	InChI=1S/C12H14ClFO2/c1-8(2)6-7-16-12(15)9-4-3-5-10(13)11(9)14/h3-5,8H,6-7H2,1-2H
InchiKey:	HLTSQLSXYFNBDL-UHFFFAOYSA-N
Formula:	C12H14ClFO2
SMILES:	CC(C)CCOC(=O)c1cccc(Cl)c1F
Mol. weight [g/mol]:	244.69

Physical Properties

Property code	Value	Unit	Source
gf	-299.79	kJ/mol	Joback Method
hf	-539.35	kJ/mol	Joback Method
hfus	26.64	kJ/mol	Joback Method
hvap	58.24	kJ/mol	Joback Method
log10ws	-4.16		Crippen Method
logp	3.682		Crippen Method
mcvol	177.630	ml/mol	McGowan Method
pc	2274.07	kPa	Joback Method
rinpol	1653.00		NIST Webbook
rinpol	1653.00		NIST Webbook
tb	623.15	K	Joback Method
tc	829.57	K	Joback Method
tf	364.13	K	Joback Method
vc	0.684	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	429.19	J/molxK	623.15	Joback Method
cpg	442.65	J/molxK	657.55	Joback Method
cpg	455.34	J/molxK	691.96	Joback Method
cpg	467.28	J/molxK	726.36	Joback Method
cpg	478.49	J/molxK	760.77	Joback Method
cpg	488.97	J/molxK	795.17	Joback Method
cpg	498.75	J/molxK	829.57	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U360580&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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

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
hvp:	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
rinp:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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