

2,4-Difluorobenzoic acid, isobutyl ester

Inchi:	InChI=1S/C11H12F2O2/c1-7(2)6-15-11(14)9-4-3-8(12)5-10(9)13/h3-5,7H,6H2,1-2H3
InchiKey:	KQWWINUXYGZMJB-UHFFFAOYSA-N
Formula:	C11H12F2O2
SMILES:	CC(C)COC(=O)c1ccc(F)cc1F
Mol. weight [g/mol]:	214.21

Physical Properties

Property code	Value	Unit	Source
gf	-491.09	kJ/mol	Joback Method
hf	-699.08	kJ/mol	Joback Method
hfus	22.93	kJ/mol	Joback Method
hvap	50.81	kJ/mol	Joback Method
log10ws	-3.39		Crippen Method
logp	2.778		Crippen Method
mcvol	153.070	ml/mol	McGowan Method
pc	2477.65	kPa	Joback Method
rinpol	1282.00		NIST Webbook
rinpol	1282.00		NIST Webbook
tb	562.11	K	Joback Method
tc	758.12	K	Joback Method
tf	323.53	K	Joback Method
vc	0.598	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	362.64	J/mol×K	562.11	Joback Method
cpg	375.53	J/mol×K	594.78	Joback Method
cpg	387.76	J/mol×K	627.45	Joback Method
cpg	399.36	J/mol×K	660.11	Joback Method
cpg	410.33	J/mol×K	692.78	Joback Method
cpg	420.69	J/mol×K	725.45	Joback Method
cpg	430.43	J/mol×K	758.12	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.cheméo.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=U338780&Units=SI

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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