

2,4-Difluorobenzoic acid, 3-methylphenyl ester

Inchi:	InChI=1S/C14H10F2O2/c1-9-3-2-4-11(7-9)18-14(17)12-6-5-10(15)8-13(12)16/h2-8H,1H3
InchiKey:	GFAZDDZQDAEMDD-UHFFFAOYSA-N
Formula:	C14H10F2O2
SMILES:	<chem>Cc1cccc(OC(=O)c2ccc(F)cc2F)c1</chem>
Mol. weight [g/mol]:	248.22

Physical Properties

Property code	Value	Unit	Source
gf	-360.61	kJ/mol	Joback Method
hf	-530.66	kJ/mol	Joback Method
hfus	27.88	kJ/mol	Joback Method
hvap	60.82	kJ/mol	Joback Method
log10ws	-4.70		Crippen Method
logp	3.492		Crippen Method
mvol	171.580	ml/mol	McGowan Method
pc	2527.73	kPa	Joback Method
rinpol	1756.00		NIST Webbook
tb	662.85	K	Joback Method
tc	886.28	K	Joback Method
tf	411.28	K	Joback Method
vc	0.663	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	429.07	J/molxK	662.85	Joback Method
cpg	442.31	J/molxK	700.09	Joback Method
cpg	454.63	J/molxK	737.33	Joback Method
cpg	466.03	J/molxK	774.57	Joback Method
cpg	476.55	J/molxK	811.80	Joback Method
cpg	486.21	J/molxK	849.04	Joback Method
cpg	495.04	J/molxK	886.28	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U357597&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
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
rinpola:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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