

5-Fluoro-2-trifluoromethylbenzoic acid, 4-methoxyphenyl ester

Inchi:	InChI=1S/C15H10F4O3/c1-21-10-3-5-11(6-4-10)22-14(20)12-8-9(16)2-7-13(12)15(17,18
InchiKey:	XXOITGAEISJHDZ-UHFFFAOYSA-N
Formula:	C15H10F4O3
SMILES:	COc1ccc(OC(=O)c2cc(F)ccc2C(F)(F)F)cc1
Mol. weight [g/mol]:	314.23

Physical Properties

Property code	Value	Unit	Source
gf	-843.97	kJ/mol	Joback Method
hf	-1084.49	kJ/mol	Joback Method
hfus	30.40	kJ/mol	Joback Method
hvap	62.52	kJ/mol	Joback Method
log10ws	-5.11		Crippen Method
logp	4.072		Crippen Method
mcvol	195.080	ml/mol	McGowan Method
pc	2117.78	kPa	Joback Method
rinpol	1856.00		NIST Webbook
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tb	703.46	K	Joback Method
tc	913.82	K	Joback Method
tf	448.38	K	Joback Method
vc	0.762	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	523.99	J/molxK	703.46	Joback Method
cpg	536.60	J/molxK	738.52	Joback Method
cpg	548.25	J/molxK	773.58	Joback Method
cpg	558.99	J/molxK	808.64	Joback Method
cpg	568.85	J/molxK	843.70	Joback Method
cpg	577.85	J/molxK	878.76	Joback Method
cpg	586.02	J/molxK	913.82	Joback Method

Sources

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=U357633&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws

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

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