

Benzoic acid, 4-fluoro-, ethyl ester

Other names:	Benzoic acid, p-fluoro-, ethyl ester p-Fluorobenzoic acid, ethyl ester Ethyl p-fluorobenzoate Ethyl 4-fluorobenzoate 4-Fluorobenzoic acid ethyl ester Ethyl para-fluorobenzoate
Inchi:	InChI=1S/C9H9FO2/c1-2-12-9(11)7-3-5-8(10)6-4-7/h3-6H,2H2,1H3
InchiKey:	UMPRJGKLMUDRHL-UHFFFAOYSA-N
Formula:	C9H9FO2
SMILES:	CCOC(=O)c1ccc(F)cc1
Mol. weight [g/mol]:	168.16
CAS:	451-46-7

Physical Properties

Property code	Value	Unit	Source
chl	-4436.92	kJ/mol	NIST Webbook
gf	-301.05	kJ/mol	Joback Method
hf	-444.94	kJ/mol	Joback Method
hfus	18.59	kJ/mol	Joback Method
hvap	46.91	kJ/mol	Joback Method
log10ws	-2.46		Crippen Method
logp	2.002		Crippen Method
mvol	123.120	ml/mol	McGowan Method
pc	3210.04	kPa	Joback Method
tb	483.20	K	NIST Webbook
tc	718.86	K	Joback Method
tf	302.88	K	Joback Method
vc	0.473	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	264.57	J/mol×K	512.54	Joback Method
cpg	276.18	J/mol×K	546.93	Joback Method

cpg	287.19	J/mol×K	581.31	Joback Method
cpg	297.62	J/mol×K	615.70	Joback Method
cpg	307.46	J/mol×K	650.08	Joback Method
cpg	316.72	J/mol×K	684.47	Joback Method
cpg	325.43	J/mol×K	718.86	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C451467&Units=SI

Legend

chl:	Standard liquid enthalpy of combustion
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/38-751-6/Benzoic-acid-4-fluoro-ethyl-ester.pdf>

Generated by Cheméo on 2024-04-23 16:23:16.962661946 +0000 UTC m=+16178645.883239258.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.