4-Fluorodiphenyl ether

Other names:	Benzene, 1-fluoro-4-phenoxy-
	1-fluoro-4-phenoxybenzene
Inchi:	InChI=1S/C12H9FO/c13-10-6-8-12(9-7-10)14-11-4-2-1-3-5-11/h1-9H
InchiKey:	AODSTUBSNYVSSL-UHFFFAOYSA-N
Formula:	C12H9FO
SMILES:	Fc1ccc(Oc2ccccc2)cc1
Mol. weight [g/mol]:	188.20
CAS:	330-84-7

Physical Properties

Property code	Value	Unit	Source
gf	-34.46	kJ/mol	Joback Method
hf	-157.75	kJ/mol	Joback Method
hfus	18.80	kJ/mol	Joback Method
hvap	49.11	kJ/mol	Joback Method
log10ws	-3.44		Crippen Method
logp	3.618		Crippen Method
mcvol	140.060	ml/mol	McGowan Method
pc	3138.51	kPa	Joback Method
tb	553.99	K	Joback Method
tc	788.45	K	Joback Method
tf	313.18	K	Joback Method
vc	0.527	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	310.72	J/mol×K	553.99	Joback Method
cpg	325.35	J/mol×K	593.07	Joback Method
cpg	338.96	J/mol×K	632.14	Joback Method
cpg	351.58	J/mol×K	671.22	Joback Method
cpg	363.25	J/mol×K	710.30	Joback Method
cpg	374.00	J/mol×K	749.38	Joback Method
cpg	383.89	J/mol×K	788.45	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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=C330847&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
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

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