2-Ethoxyethyl 2,2,3,3,3-pentafluoropropanoate

Other names: 2-Ethoxyethanol, pentafluoropropionate
Inchi: InChI=1S/C7H9F5O3/c1-2-14-3-4-15-5(13)6(8,9)7(10,11)12/h2-4H2,1H3
InchiKey: GCMCIDXYCZFSIG-UHFFFAOYSA-N
Formula: C7H9F5O3
SMILES: CCOCCOC(=O)C(F)(F)C(F)(F)F
Mol. weight [g/mol]: 236.14

Physical Properties

Property code	Value	Unit	Source
gf	-1299.23	kJ/mol	Joback Method
hf	-1562.88	kJ/mol	Joback Method
hfus	18.43	kJ/mol	Joback Method
hvap	36.06	kJ/mol	Joback Method
log10ws	-1.68		Crippen Method
logp	1.764		Crippen Method
mcvol	131.650	ml/mol	McGowan Method
pc	2384.19	kPa	Joback Method
rinpol	796.80		NIST Webbook
rinpol	796.80		NIST Webbook
tb	448.16	K	Joback Method
tc	602.97	K	Joback Method
tf	270.83	K	Joback Method
vc	0.537	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	308.57	J/mol×K	448.16	Joback Method
cpg	319.02	J/mol×K	473.96	Joback Method
cpg	329.00	J/mol×K	499.76	Joback Method
cpg	338.50	J/mol×K	525.56	Joback Method
cpg	347.54	J/mol×K	551.37	Joback Method
cpg	356.13	J/mol×K	577.17	Joback Method
cpg	364.29	J/mol×K	602.97	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U351983&Units=SI
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

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