2-Methoxyethyl 2,2,3,3,3-pentafluoropropanoate

Other names: 2-Methoxyethanol, pentafluoropropionate
Inchi: InChI=1S/C6H7F5O3/c1-13-2-3-14-4(12)5(7,8)6(9,10)11/h2-3H2,1H3
InchiKey: QAWGAEJMAXKSIM-UHFFFAOYSA-N
Formula: C6H7F5O3
SMILES: COCCOC(=O)C(F)(F)C(F)(F)F
Mol. weight [g/mol]: 222.11

Physical Properties

Property code	Value	Unit	Source
gf	-1307.65	kJ/mol	Joback Method
hf	-1542.24	kJ/mol	Joback Method
hfus	15.84	kJ/mol	Joback Method
hvap	33.84	kJ/mol	Joback Method
log10ws	-1.26		Crippen Method
logp	1.374		Crippen Method
mcvol	117.560	ml/mol	McGowan Method
pc	2624.46	kPa	Joback Method
rinpol	748.30		NIST Webbook
tb	425.28	K	Joback Method
tc	580.47	K	Joback Method
tf	259.56	K	Joback Method
vc	0.481	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	268.31	J/mol×K	425.28	Joback Method
cpg	277.83	J/mol×K	451.14	Joback Method
cpg	286.91	J/mol×K	477.01	Joback Method
cpg	295.55	J/mol×K	502.87	Joback Method
cpg	303.76	J/mol×K	528.74	Joback Method
cpg	311.56	J/mol×K	554.60	Joback Method
cpg	318.97	J/mol×K	580.47	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=U351980&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume