1-Ethoxy-1,1,2,2-tetrafluoroethane

Inchi: InChI=1S/C4H6F4O/c1-2-9-4(7,8)3(5)6/h3H,2H2,1H3
InchiKey: HBRLMDFVVMYNFH-UHFFFAOYSA-N
Formula: C4H6F4O
SMILES: CCOC(F)(F)C(F)F
Mol. weight [g/mol]: 146.08
CAS: 512-51-6

Physical Properties

Property code	Value	Unit	Source
gf	-901.04	kJ/mol	Joback Method
hf	-1056.58	kJ/mol	Joback Method
hfus	8.69	kJ/mol	Joback Method
hvap	33.00	kJ/mol	NIST Webbook
log10ws	-1.71		Crippen Method
logp	1.881		Crippen Method
mcvol	80.170	ml/mol	McGowan Method
pc	3184.73	kPa	Joback Method
tb	306.75	K	Joback Method
tc	448.84	K	Joback Method
tf	146.85	K	Joback Method
vc	0.333	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	147.93	J/mol×K	306.75	Joback Method
cpg	155.43	J/mol×K	330.43	Joback Method
cpg	162.64	J/mol×K	354.11	Joback Method
cpg	169.58	J/mol×K	377.79	Joback Method
cpg	176.26	J/mol×K	401.47	Joback Method
cpg	182.67	J/mol×K	425.15	Joback Method
cpg	188.83	J/mol×K	448.84	Joback Method

Sources

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=C512516&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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