2-(2-Ethoxyethoxy)ethyl 2,2,3,3,3-pentafluoropropanoate

Other names: Diethylene glycol monoethyl ether, pentafluoropropionate
3,6-Dioxaoct-1-yl pentafluoropropionate

Inchi: InChI=1S/C9H13F5O4/c1-2-16-3-4-17-5-6-18-7(15)8(10,11)9(12,13)14/h2-6H2,1H3

InchiKey: FQCCIXQOWKJORU-UHFFFAOYSA-N

Formula: C9H13F5O4

SMILES: CCOCCOCCOC(=O)C(F)(F)C(F)(F)F

Mol. weight [g/mol]: 280.19

Physical Properties

Property code	Value	Unit	Source
gf	-1387.39	kJ/mol	Joback Method
hf	-1736.38	kJ/mol	Joback Method
hfus	24.80	kJ/mol	Joback Method
hvap	42.93	kJ/mol	Joback Method
log10ws	-1.60		Crippen Method
logp	1.780		Crippen Method
mcvol	165.700	ml/mol	McGowan Method
pc	1963.07	kPa	Joback Method
rinpol	1051.80		NIST Webbook
tb	516.34	K	Joback Method
tc	670.67	K	Joback Method
tf	315.60	K	Joback Method
vc	0.667	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	420.63	J/mol×K	516.34	Joback Method
cpg	432.45	J/mol×K	542.06	Joback Method
cpg	443.77	J/mol×K	567.78	Joback Method
cpg	454.58	J/mol×K	593.50	Joback Method
cpg	464.90	J/mol×K	619.22	Joback Method
cpg	474.74	J/mol×K	644.95	Joback Method
cpg	484.11	J/mol×K	670.67	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=U351984&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