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

Other names: Diethylene glycol monomethyl ether, pentafluoropropionate
3,6-Dioxahept-1-yl pentafluoropropionate

Inchi: InChI=1S/C8H11F5O4/c1-15-2-3-16-4-5-17-6(14)7(9,10)8(11,12)13/h2-5H2,1H3

InchiKey: PJEQFSMFVXFBJX-UHFFFAOYSA-N

Formula: C8H11F5O4

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

Mol. weight [g/mol]: 266.16

Physical Properties

Property code	Value	Unit	Source
gf	-1395.81	kJ/mol	Joback Method
hf	-1715.74	kJ/mol	Joback Method
hfus	22.21	kJ/mol	Joback Method
hvap	40.70	kJ/mol	Joback Method
log10ws	-1.18		Crippen Method
logp	1.390		Crippen Method
mcvol	151.610	ml/mol	McGowan Method
pc	2141.36	kPa	Joback Method
rinpol	990.60		NIST Webbook
rinpol	990.60		NIST Webbook
tb	493.46	K	Joback Method
tc	648.14	K	Joback Method
tf	304.33	K	Joback Method
vc	0.612	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	375.51	J/mol×K	493.46	Joback Method
cpg	386.57	J/mol×K	519.24	Joback Method
cpg	397.15	J/mol×K	545.02	Joback Method
cpg	407.26	J/mol×K	570.80	Joback Method
cpg	416.91	J/mol×K	596.58	Joback Method
cpg	426.12	J/mol×K	622.36	Joback Method

cpg	434.88	J/mol×K	648.14	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=U351981&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