2-(2-Methoxyethoxy)ethyl 2,2,2-trifluoroacetate

Other names: Diethylene glycol monomethyl ether, trifluoroacetate
3,6-Dioxahept-1-yl trifluoroacetate
Inchi: InChI=1S/C7H11F3O4/c1-12-2-3-13-4-5-14-6(11)7(8,9)10/h2-5H2,1H3
InchiKey: SKIQSOPREJGUFT-UHFFFAOYSA-N
Formula: C7H11F3O4
SMILES: COCCOCCOC(=O)C(F)(F)F
Mol. weight [g/mol]: 216.16

Physical Properties

Property code	Value	Unit	Source
gf	-1017.45	kJ/mol	Joback Method
hf	-1294.13	kJ/mol	Joback Method
hfus	20.88	kJ/mol	Joback Method
hvap	41.41	kJ/mol	Joback Method
log10ws	-0.45		Crippen Method
logp	0.755		Crippen Method
mcvol	133.980	ml/mol	McGowan Method
pc	2515.07	kPa	Joback Method
rinpol	973.90		NIST Webbook
tb	475.27	K	Joback Method
tc	636.32	K	Joback Method
tf	289.46	K	Joback Method
vc	0.530	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	312.77	J/mol×K	475.27	Joback Method
cpg	323.03	J/mol×K	502.11	Joback Method
cpg	332.94	J/mol×K	528.95	Joback Method
cpg	342.49	J/mol×K	555.80	Joback Method
cpg	351.68	J/mol×K	582.64	Joback Method
cpg	360.52	J/mol×K	609.48	Joback Method
cpg	368.99	J/mol×K	636.32	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=U351953&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