2-[2-(2-Ethoxyethoxy)ethoxy]ethyl acetate

Inchi: InChI=1S/C10H20O5/c1-3-12-4-5-13-6-7-14-8-9-15-10(2)11/h3-9H2,1-2H3
InchiKey: NVSCAPMJFRYMFK-UHFFFAOYSA-N
Formula: C10H20O5
SMILES: CCOCCOCCOCCOC(C)=O
Mol. weight [g/mol]: 220.26
CAS: 71648-22-1

Physical Properties

Property code	Value	Unit	Source
gf	-515.60	kJ/mol	Joback Method
hf	-891.19	kJ/mol	Joback Method
hfus	28.01	kJ/mol	Joback Method
hvap	54.24	kJ/mol	Joback Method
log10ws	-0.13		Crippen Method
logp	0.619		Crippen Method
mcvol	176.810	ml/mol	McGowan Method
pc	2098.42	kPa	Joback Method
rinpol	1454.50		NIST Webbook
rinpol	1454.50		NIST Webbook
tb	571.75	K	Joback Method
tc	742.72	K	Joback Method
tf	341.31	K	Joback Method
vc	0.673	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	446.66	J/mol×K	571.75	Joback Method
cpg	510.65	J/mol×K	714.23	Joback Method
cpg	498.81	J/mol×K	685.73	Joback Method
cpg	486.47	J/mol×K	657.24	Joback Method
cpg	473.66	J/mol×K	628.74	Joback Method
cpg	460.38	J/mol×K	600.25	Joback Method
cpg	521.97	J/mol×K	742.72	Joback Method

dvisc	0.0001165	Pa×s	571.75	Joback Method
dvisc	0.0001496	Pa×s	533.34	Joback Method
dvisc	0.0001998	Pa×s	494.94	Joback Method
dvisc	0.0002800	Pa×s	456.53	Joback Method
dvisc	0.0004176	Pa×s	418.12	Joback Method
dvisc	0.0006753	Pa×s	379.72	Joback Method
dvisc	0.0012166	Pa×s	341.31	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=C71648221&Units=SI

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
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