2-(2-[2-(Propionyloxy)ethoxy]ethoxy)ethyl propionate

Other names: Triethylene glycol, dipropionate
Inchi: InChI=1S/C12H22O6/c1-3-11(13)17-9-7-15-5-6-16-8-10-18-12(14)4-2/h3-10H2,1-2H3
InchiKey: AWKXKNCCQLNZDB-UHFFFAOYSA-N
Formula: C12H22O6
SMILES: CCC(=O)OCCOCCOCCOC(=O)CC
Mol. weight [g/mol]: 262.30
CAS: 141-34-4

Physical Properties

Property code	Value	Unit	Source
gf	-627.68	kJ/mol	Joback Method
hf	-1045.05	kJ/mol	Joback Method
hfus	34.79	kJ/mol	Joback Method
hvap	65.44	kJ/mol	Joback Method
log10ws	-0.75		Crippen Method
logp	0.926		Crippen Method
mcvol	206.560	ml/mol	McGowan Method
pc	1870.79	kPa	Joback Method
tb	671.38	K	Joback Method
tc	848.52	K	Joback Method
tf	413.78	K	Joback Method
vc	0.791	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	570.81	J/mol×K	671.38	Joback Method
cpg	585.08	J/mol×K	700.90	Joback Method
cpg	598.70	J/mol×K	730.43	Joback Method
cpg	611.66	J/mol×K	759.95	Joback Method
cpg	623.94	J/mol×K	789.47	Joback Method
cpg	635.53	J/mol×K	819.00	Joback Method
cpg	646.41	J/mol×K	848.52	Joback Method
dvisc	0.0008628	Pa×s	413.78	Joback Method

dvisc	0.0004978	Pa×s	456.71	Joback Method
dvisc	0.0003156	Pa×s	499.65	Joback Method
dvisc	0.0002151	Pa×s	542.58	Joback Method
dvisc	0.0001551	Pa×s	585.51	Joback Method
dvisc	0.0001169	Pa×s	628.45	Joback Method
dvisc	0.0000914	Pa×s	671.38	Joback Method

Sources

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=C141344&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume