Tetrapropylene glycol monopropyl ether

Inchi: InChI=1S/C15H32O5/c1-6-7-17-9-13(3)19-11-15(5)20-10-14(4)18-8-12(2)16/h12-16H,6-1
InchiKey: GDDWCUCSVXSHAZ-UHFFFAOYSA-N
Formula: C15H32O5
SMILES: CCCOCC(C)OCC(C)OCC(C)OCC(C)O
Mol. weight [g/mol]: 292.41

Physical Properties

Property code	Value	Unit	Source
gf	-491.16	kJ/mol	Joback Method
hf	-1055.16	kJ/mol	Joback Method
hfus	29.35	kJ/mol	Joback Method
hvap	73.75	kJ/mol	Joback Method
log10ws	-2.16		Crippen Method
logp	2.009		Crippen Method
mcvol	251.560	ml/mol	McGowan Method
pc	1477.02	kPa	Joback Method
rinpol	1555.00		NIST Webbook
rinpol	1557.00		NIST Webbook
tb	722.70	K	Joback Method
tc	893.99	K	Joback Method
tf	348.55	K	Joback Method
vc	0.943	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	760.34	J/mol×K	722.70	Joback Method
cpg	835.77	J/mol×K	865.44	Joback Method
cpg	822.31	J/mol×K	836.89	Joback Method
cpg	808.03	J/mol×K	808.35	Joback Method
cpg	792.94	J/mol×K	779.80	Joback Method
cpg	777.04	J/mol×K	751.25	Joback Method
cpg	848.41	J/mol×K	893.99	Joback Method
dvisc	0.0000100	Pa×s	722.70	Joback Method

dvisc	0.0000170	Pa×s	660.34	Joback Method
dvisc	0.0000323	Pa×s	597.98	Joback Method
dvisc	0.0000716	Pa×s	535.62	Joback Method
dvisc	0.0001954	Pa×s	473.27	Joback Method
dvisc	0.0007234	Pa×s	410.91	Joback Method
dvisc	0.0042781	Pa×s	348.55	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R4636&Units=SI
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

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