Triethylene glycol, decyl-methyl ether

Inchi: InChI=1S/C17H36O4/c1-3-4-5-6-7-8-9-10-11-19-14-15-21-17-16-20-13-12-18-2/h3-17H2
InchiKey: NWBNGWGOJMEYRZ-UHFFFAOYSA-N
Formula: C17H36O4
SMILES: CCCCCCCCCCOCCOCCOCCOC
Mol. weight [g/mol]: 304.47

Physical Properties

Property code	Value	Unit	Source
gf	-327.74	kJ/mol	Joback Method
hf	-923.09	kJ/mol	Joback Method
hfus	44.54	kJ/mol	Joback Method
hvap	63.08	kJ/mol	Joback Method
log10ws	-3.29		Crippen Method
logp	3.823		Crippen Method
mcvol	273.870	ml/mol	McGowan Method
pc	1174.44	kPa	Joback Method
rinpol	2121.00		NIST Webbook
rinpol	2121.00		NIST Webbook
tb	678.04	K	Joback Method
tc	841.16	K	Joback Method
tf	370.27	K	Joback Method
vc	1.060	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	796.81	J/mol×K	678.04	Joback Method
cpg	815.66	J/mol×K	705.23	Joback Method
cpg	833.75	J/mol×K	732.41	Joback Method
cpg	851.08	J/mol×K	759.60	Joback Method
cpg	867.63	J/mol×K	786.79	Joback Method
cpg	883.42	J/mol×K	813.98	Joback Method
cpg	898.42	J/mol×K	841.16	Joback Method
dvisc	0.0009397	Pa×s	370.27	Joback Method

dvisc	0.0004271	Pa×s	421.56	Joback Method
dvisc	0.0002303	Pa×s	472.86	Joback Method
dvisc	0.0001402	Pa×s	524.15	Joback Method
dvisc	0.0000932	Pa×s	575.45	Joback Method
dvisc	0.0000663	Pa×s	626.74	Joback Method
dvisc	0.0000496	Pa×s	678.04	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=R120031&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