1-(ethoxyethoxy)octane

Inchi: InChI=1S/C12H26O2/c1-3-5-6-7-8-9-10-14-12-11-13-4-2/h3-12H2,1-2H3
InchiKey: YDXZRYZRBMQYBK-UHFFFAOYSA-N
Formula: C12H26O2
SMILES: CCCCCCCCOCCOCC
Mol. weight [g/mol]: 202.33

Physical Properties

Property code	Value	Unit	Source
gf	-159.84	kJ/mol	Joback Method
hf	-555.45	kJ/mol	Joback Method
hfus	29.21	kJ/mol	Joback Method
hvap	47.13	kJ/mol	Joback Method
log10ws	-3.02		Crippen Method
logp	3.400		Crippen Method
mcvol	191.680	ml/mol	McGowan Method
pc	1730.34	kPa	Joback Method
ripol	1449.00		NIST Webbook
tb	518.80	K	Joback Method
tc	679.84	K	Joback Method
tf	269.46	K	Joback Method
vc	0.744	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	464.35	J/mol×K	518.80	Joback Method
cpg	480.54	J/mol×K	545.64	Joback Method
cpg	496.18	J/mol×K	572.48	Joback Method
cpg	511.30	J/mol×K	599.32	Joback Method
cpg	525.89	J/mol×K	626.16	Joback Method
cpg	539.95	J/mol×K	653.00	Joback Method
cpg	553.48	J/mol×K	679.84	Joback Method
dvisc	0.0029073	Pa×s	269.46	Joback Method
dvisc	0.0012610	Pa×s	311.02	Joback Method

dvisc	0.0006660	Pa×s	352.57	Joback Method
dvisc	0.0004024	Pa×s	394.13	Joback Method
dvisc	0.0002677	Pa×s	435.69	Joback Method
dvisc	0.0001912	Pa×s	477.24	Joback Method
dvisc	0.0001441	Pa×s	518.80	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R340720&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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume