Ethyl undecyl ether

Inchi: InChI=1S/C13H28O/c1-3-5-6-7-8-9-10-11-12-13-14-4-2/h3-13H2,1-2H3
InchiKey: AUEXYQKWVYHBHO-UHFFFAOYSA-N
Formula: C13H28O
SMILES: CCCCCCCCCCCOCC
Mol. weight [g/mol]: 200.36
CAS: 78371-01-4

Physical Properties

Property code	Value	Unit	Source
gf	-46.42	kJ/mol	Joback Method
hf	-443.87	kJ/mol	Joback Method
hfus	30.61	kJ/mol	Joback Method
hvap	46.94	kJ/mol	Joback Method
log10ws	-4.35		Crippen Method
logp	4.554		Crippen Method
mcvol	199.900	ml/mol	McGowan Method
pc	1621.98	kPa	Joback Method
tb	519.26	K	Joback Method
tc	679.58	K	Joback Method
tf	258.50	K	Joback Method
vc	0.781	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	485.12	J/mol×K	519.26	Joback Method
cpg	502.25	J/mol×K	545.98	Joback Method
cpg	518.78	J/mol×K	572.70	Joback Method
cpg	534.71	J/mol×K	599.42	Joback Method
cpg	550.05	J/mol×K	626.14	Joback Method
cpg	564.81	J/mol×K	652.86	Joback Method
cpg	579.00	J/mol×K	679.58	Joback Method
dvisc	0.0040611	Pa×s	258.50	Joback Method
dvisc	0.0016146	Pa×s	301.96	Joback Method

dvisc	0.0008096	Pa×s	345.42	Joback Method
dvisc	0.0004737	Pa×s	388.88	Joback Method
dvisc	0.0003087	Pa×s	432.34	Joback Method
dvisc	0.0002175	Pa×s	475.80	Joback Method
dvisc	0.0001625	Pa×s	519.26	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=C78371014&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume