ETHYL DODECYL ETHER

Inchi: InChI=1S/C14H30O/c1-3-5-6-7-8-9-10-11-12-13-14-15-4-2/h3-14H2,1-2H3
InchiKey: HAOXTAJLDMZCQJ-UHFFFAOYSA-N
Formula: C14H30O
SMILES: CCCCCCCCCCCCOCC
Mol. weight [g/mol]: 214.39

Physical Properties

Property code	Value	Unit	Source
af	0.6964		Cheméo Relay (1.0)
gf	-38.00	kJ/mol	Joback Method
hf	-467.59	kJ/mol	Cheméo Relay (1.0)
hfus	33.20	kJ/mol	Joback Method
hvap	73.42	kJ/mol	Cheméo Relay (1.0)
ie	9.42	eV	Cheméo Relay (1.0)
log10ws	-5.69		Cheméo Relay (1.0)
logp	4.944		Crippen Method
mcvol	213.990	ml/mol	McGowan Method
pc	1503.48	kPa	Joback Method
tb	522.84	K	Cheméo Relay (1.0)
tc	687.93	K	Cheméo Relay (1.0)
tf	262.30	K	Cheméo Relay (1.0)
vc	0.847	m3/kmol	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	536.33	J/mol×K	542.14	Joback Method
cpg	554.10	J/mol×K	568.76	Joback Method
cpg	571.22	J/mol×K	595.39	Joback Method
cpg	587.72	J/mol×K	622.01	Joback Method
cpg	603.58	J/mol×K	648.63	Joback Method
cpg	618.84	J/mol×K	675.26	Joback Method
cpg	633.50	J/mol×K	701.88	Joback Method
dvisc	0.0038629	Pa×s	269.77	Joback Method

dvisc	0.0015169	Pa×s	315.16	Joback Method
dvisc	0.0007537	Pa×s	360.56	Joback Method
dvisc	0.0004379	Pa×s	405.95	Joback Method
dvisc	0.0002838	Pa×s	451.35	Joback Method
dvisc	0.0001991	Pa×s	496.75	Joback Method
dvisc	0.0001482	Pa×s	542.14	Joback Method

Sources

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Cheméo Relay (1.0):	
Cheméo Relay (1.0, beta):	
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C7289374&Units=SI

Legend

af:	Acentric Factor
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
ie:	Ionization energy
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