1,3-Propanediol, decyl ethyl ether

Inchi: InChI=1S/C15H32O2/c1-3-5-6-7-8-9-10-11-13-17-15-12-14-16-4-2/h3-15H2,1-2H3
InchiKey: JPCNMBFSVIQKFK-UHFFFAOYSA-N
Formula: C15H32O2
SMILES: CCCCCCCCCCOCCCOCC
Mol. weight [g/mol]: 244.41

Physical Properties

Property code	Value	Unit	Source
gf	-134.58	kJ/mol	Joback Method
hf	-617.37	kJ/mol	Joback Method
hfus	36.98	kJ/mol	Joback Method
hvap	53.80	kJ/mol	Joback Method
log10ws	-4.28		Crippen Method
logp	4.570		Crippen Method
mcvol	233.950	ml/mol	McGowan Method
pc	1379.91	kPa	Joback Method
rinpol	1585.00		NIST Webbook
rinpol	1585.00		NIST Webbook
tb	587.44	K	Joback Method
tc	747.21	K	Joback Method
tf	303.27	K	Joback Method
vc	0.911	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	620.29	J/mol×K	587.44	Joback Method
cpg	638.39	J/mol×K	614.07	Joback Method
cpg	655.83	J/mol×K	640.70	Joback Method
cpg	672.63	J/mol×K	667.32	Joback Method
cpg	688.78	J/mol×K	693.95	Joback Method
cpg	704.29	J/mol×K	720.58	Joback Method
cpg	719.16	J/mol×K	747.21	Joback Method
dvisc	0.0024441	Pa×s	303.27	Joback Method

dvisc	0.0010177	Pa×s	350.63	Joback Method
dvisc	0.0005220	Pa×s	397.99	Joback Method
dvisc	0.0003086	Pa×s	445.36	Joback Method
dvisc	0.0002019	Pa×s	492.72	Joback Method
dvisc	0.0001422	Pa×s	540.08	Joback Method
dvisc	0.0001060	Pa×s	587.44	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=U406350&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