1-Octadecanol, methyl ether

Inchi: InChI=1S/C19H40O/c1-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-2/h3-19H2,1-2H
InchiKey: RVJIJWSQYZTQBW-UHFFFAOYSA-N
Formula: C19H40O
SMILES: CCCCCCCCCCCCCCCCCCCOC
Mol. weight [g/mol]: 284.52

Physical Properties

Property code	Value	Unit	Source
gf	4.10	kJ/mol	Joback Method
hf	-567.71	kJ/mol	Joback Method
hfus	46.15	kJ/mol	Joback Method
hvap	60.30	kJ/mol	Joback Method
log10ws	-6.86		Crippen Method
logp	6.894		Crippen Method
mcvol	284.440	ml/mol	McGowan Method
pc	1068.66	kPa	Joback Method
rinpol	2032.30		NIST Webbook
rinpol	2032.30		NIST Webbook
tb	656.54	K	Joback Method
tc	817.30	K	Joback Method
tf	326.12	K	Joback Method
vc	1.117	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	815.08	J/mol×K	656.54	Joback Method
cpg	835.37	J/mol×K	683.33	Joback Method
cpg	854.83	J/mol×K	710.13	Joback Method
cpg	873.49	J/mol×K	736.92	Joback Method
cpg	891.37	J/mol×K	763.71	Joback Method
cpg	908.48	J/mol×K	790.51	Joback Method
cpg	924.85	J/mol×K	817.30	Joback Method
dvisc	0.0026162	Pa×s	326.12	Joback Method

dvisc	0.0009778	Pa×s	381.19	Joback Method
dvisc	0.0004686	Pa×s	436.26	Joback Method
dvisc	0.0002648	Pa×s	491.33	Joback Method
dvisc	0.0001679	Pa×s	546.40	Joback Method
dvisc	0.0001157	Pa×s	601.47	Joback Method
dvisc	0.0000849	Pa×s	656.54	Joback Method

Sources

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=U333927&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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