methyl tetradecyl ether

Inchi: InChI=1S/C15H32O/c1-3-4-5-6-7-8-9-10-11-12-13-14-15-16-2/h3-15H2,1-2H3
InchiKey: WBALMRMHNRFSSF-UHFFFAOYSA-N
Formula: C15H32O
SMILES: CCCCCCCCCCCCCCOC
Mol. weight [g/mol]: 228.41
CAS: 7388-90-1

Physical Properties

Property code	Value	Unit	Source
af	0.7281		Cheméo Relay (1.0)
gf	-29.58	kJ/mol	Joback Method
hf	-476.24	kJ/mol	Cheméo Relay (1.0)
hfus	35.79	kJ/mol	Joback Method
hvap	79.83	kJ/mol	Cheméo Relay (1.0)
ie	9.56	eV	Cheméo Relay (1.0)
log10ws	-6.16		Cheméo Relay (1.0)
logp	5.334		Crippen Method
mcvol	228.080	ml/mol	McGowan Method
pc	1397.50	kPa	Joback Method
tb	543.54	K	Cheméo Relay (1.0)
tc	707.91	K	Cheméo Relay (1.0)
tf	287.48	K	Cheméo Relay (1.0)
vc	0.904	m3/kmol	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	589.19	J/mol×K	565.02	Joback Method
cpg	689.31	J/mol×K	724.37	Joback Method
cpg	674.23	J/mol×K	697.81	Joback Method
cpg	658.53	J/mol×K	671.25	Joback Method
cpg	642.19	J/mol×K	644.69	Joback Method
cpg	625.19	J/mol×K	618.14	Joback Method
cpg	607.53	J/mol×K	591.58	Joback Method

dvisc	0.0004014	Pa×s	423.03	Joback Method
dvisc	0.0001341	Pa×s	565.02	Joback Method
dvisc	0.0001808	Pa×s	517.69	Joback Method
dvisc	0.0002588	Pa×s	470.36	Joback Method
dvisc	0.0036349	Pa×s	281.04	Joback Method
dvisc	0.0006953	Pa×s	375.70	Joback Method
dvisc	0.0014111	Pa×s	328.37	Joback Method

Sources

Cheméo Relay (1.0, beta):

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C7388901&Units=SI

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):

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