1-tert-butoxy-2-ethoxyethane

Other names:	2-(2-ethoxyethoxy)-2-methylpropane
	Propane, 2-(2-ethoxyethoxy)-2-methyl-
Inchi:	InChI=1S/C8H18O2/c1-5-9-6-7-10-8(2,3)4/h5-7H2,1-4H3
InchiKey:	NUNQKTCKURIZQX-UHFFFAOYSA-N
Formula:	C8H18O2
SMILES:	CCOCCOC(C)(C)C
Mol. weight [g/mol]:	146.23
CAS:	500028-33-1

Physical Properties

Property code	Value	Unit	Source
af	0.4243		Cheméo Relay (1.0)
gf	-190.68	kJ/mol	Joback Method
hf	-481.33	kJ/mol	Cheméo Relay (1.0)
hfus	11.44	kJ/mol	Joback Method
hvap	45.53	kJ/mol	Cheméo Relay (1.0)
ie	9.25	eV	Cheméo Relay (1.0)
log10ws	-0.91		Cheméo Relay (1.0)
logp	1.838		Crippen Method
mcvol	135.320	ml/mol	McGowan Method
pc	2497.50	kPa	Joback Method
tb	420.00 ± 2.00	K	NIST Webbook
tc	577.71	K	Cheméo Relay (1.0)
tf	196.77	K	Cheméo Relay (1.0)
vc	0.506	m3/kmol	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	284.39	J/mol×K	424.05	Joback Method
cpg	359.52	J/mol×K	598.52	Joback Method
cpg	348.21	J/mol×K	569.44	Joback Method
cpg	336.43	J/mol×K	540.36	Joback Method
cpg	324.16	J/mol×K	511.28	Joback Method

cpg	311.41	J/mol×K	482.21	Joback Method
cpg	298.15	J/mol×K	453.13	Joback Method
dvisc	0.0006133	Pa×s	325.43	Joback Method
dvisc	0.0002028	Pa×s	424.05	Joback Method
dvisc	0.0002756	Pa×s	391.18	Joback Method
dvisc	0.0003964	Pa×s	358.30	Joback Method
dvisc	0.0048563	Pa×s	226.80	Joback Method
dvisc	0.0010469	Pa×s	292.55	Joback Method
dvisc	0.0020461	Pa×s	259.68	Joback Method

Sources

Cheméo Relay (1.0):

Cheméo Relay (1.0, beta):

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C500028331&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

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