Ether, tert-butyl propenyl, (E)-

Inchi: InChI=1S/C7H14O/c1-5-6-8-7(2,3)4/h5-6H,1-4H3/b6-5+
InchiKey: XGCRQUBGQPXCPL-AATRIKPKSA-N
Formula: C7H14O
SMILES: CC=COC(C)(C)C
Mol. weight [g/mol]: 114.19
CAS: 4188-72-1

Physical Properties

Property code	Value	Unit	Source
gf	-13.88	kJ/mol	Joback Method
hf	-211.56	kJ/mol	Joback Method
hfus	7.86	kJ/mol	Joback Method
hvap	32.25	kJ/mol	Joback Method
log10ws	-2.30		Crippen Method
logp	2.335		Crippen Method
mcvol	111.060	ml/mol	McGowan Method
pc	2966.57	kPa	Joback Method
tb	382.91	K	Joback Method
tc	567.42	K	Joback Method
tf	188.22	K	Joback Method
vc	0.414	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	205.24	J/mol×K	382.91	Joback Method
cpg	218.07	J/mol×K	413.66	Joback Method
cpg	230.26	J/mol×K	444.41	Joback Method
cpg	241.85	J/mol×K	475.16	Joback Method
cpg	252.86	J/mol×K	505.92	Joback Method
cpg	263.31	J/mol×K	536.67	Joback Method
cpg	273.23	J/mol×K	567.42	Joback Method
dvisc	0.0070724	Pa×s	188.22	Joback Method
dvisc	0.0025447	Pa×s	220.67	Joback Method

dvisc	0.0011899	Pa×s	253.12	Joback Method
dvisc	0.0006613	Pa×s	285.56	Joback Method
dvisc	0.0004144	Pa×s	318.01	Joback Method
dvisc	0.0002831	Pa×s	350.46	Joback Method
dvisc	0.0002063	Pa×s	382.91	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C4188721&Units=SI
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

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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume