tert-Butyl vinyl ether

Inchi: InChI=1S/C6H12O/c1-5-7-6(2,3)4/h5H,1H2,2-4H3
InchiKey: PGYJSURPYAAOMM-UHFFFAOYSA-N
Formula: C6H12O
SMILES: C=COC(C)(C)C
Mol. weight [g/mol]: 100.16
CAS: 926-02-3

Physical Properties

Property code	Value	Unit	Source
gf	-14.68	kJ/mol	Joback Method
hf	-182.71	kJ/mol	Joback Method
hfus	3.79	kJ/mol	Joback Method
hvap	29.39	kJ/mol	Joback Method
log10ws	-1.88		Crippen Method
logp	1.945		Crippen Method
mcvol	96.970	ml/mol	McGowan Method
pc	3265.31	kPa	Joback Method
rinpol	559.00		NIST Webbook
tb	352.55	K	Joback Method
tc	531.95	K	Joback Method
tf	180.27	K	Joback Method
vc	0.359	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	168.94	J/mol×K	352.55	Joback Method
cpg	180.03	J/mol×K	382.45	Joback Method
cpg	190.62	J/mol×K	412.35	Joback Method
cpg	200.74	J/mol×K	442.25	Joback Method
cpg	210.38	J/mol×K	472.15	Joback Method
cpg	219.58	J/mol×K	502.05	Joback Method
cpg	228.34	J/mol×K	531.95	Joback Method
dvisc	0.0060601	Pa×s	180.27	Joback Method

dvisc	0.0024789	Pa×s	208.98	Joback Method
dvisc	0.0012584	Pa×s	237.70	Joback Method
dvisc	0.0007394	Pa×s	266.41	Joback Method
dvisc	0.0004818	Pa×s	295.12	Joback Method
dvisc	0.0003387	Pa×s	323.84	Joback Method
dvisc	0.0002522	Pa×s	352.55	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.32430e+01
Coeff. B	-2.87072e+03
Coeff. C	-3.79360e+01
Temperature range (K), min.	259.52
Temperature range (K), max.	399.87

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R512277&Units=SI
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
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
pvap:	Vapor pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume