Butyl tert-pentyl ether

Inchi: InChI=1S/C9H20O/c1-5-7-8-10-9(3,4)6-2/h5-8H2,1-4H3
InchiKey: FTGPSKPJRKRPSX-UHFFFAOYSA-N
Formula: C9H20O
SMILES: CCCCOC(C)(C)CC
Mol. weight [g/mol]: 144.25

Physical Properties

Property code	Value	Unit	Source
gf	-77.26	kJ/mol	Joback Method
hf	-370.06	kJ/mol	Joback Method
hfus	12.84	kJ/mol	Joback Method
hvap	36.74	kJ/mol	Joback Method
log10ws	-2.79		Crippen Method
logp	2.992		Crippen Method
mcvol	143.540	ml/mol	McGowan Method
pc	2311.39	kPa	Joback Method
rinpol	906.00		NIST Webbook
rinpol	906.00		NIST Webbook
tb	424.51	K	Joback Method
tc	598.00	K	Joback Method
tf	215.84	K	Joback Method
vc	0.546	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	300.66	J/mol×K	424.51	Joback Method
cpg	370.42	J/mol×K	569.09	Joback Method
cpg	357.65	J/mol×K	540.17	Joback Method
cpg	344.30	J/mol×K	511.26	Joback Method
cpg	330.37	J/mol×K	482.34	Joback Method
cpg	315.82	J/mol×K	453.43	Joback Method
cpg	382.63	J/mol×K	598.00	Joback Method
dvisc	0.0002250	Pa×s	424.51	Joback Method

dvisc	0.0003097	Pa×s	389.73	Joback Method
dvisc	0.0004539	Pa×s	354.95	Joback Method
dvisc	0.0007228	Pa×s	320.17	Joback Method
dvisc	0.0012893	Pa×s	285.40	Joback Method
dvisc	0.0027004	Pa×s	250.62	Joback Method
dvisc	0.0071777	Pa×s	215.84	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R559687&Units=SI

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