7-Norbornadienyl t-butyl ether

Other names:	7-tert-Butoxynorbornadiene
	Bicyclo[2.2.1]hepta-2,5-diene, 7-(1,1-dimethylethoxy)-
	7-Norbornadadienyl t-butyl ether
	7-tert-butoxybicyclo[2.2.1]hepta-2,5-diene
Inchi:	InChI=1S/C11H16O/c1-11(2,3)12-10-8-4-5-9(10)7-6-8/h4-10H,1-3H3
InchiKey:	PTTSCAGWOHYHDN-UHFFFAOYSA-N
Formula:	C11H16O
SMILES:	CC(C)(C)OC1C2C=CC1C=C2
Mol. weight [g/mol]:	164.24
CAS:	877-06-5

Physical Properties

Property code	Value	Unit	Source
gf	101.19	kJ/mol	Joback Method
hf	-176.68	kJ/mol	Joback Method
hfus	15.71	kJ/mol	Joback Method
hvap	41.47	kJ/mol	Joback Method
log10ws	-2.75		Crippen Method
logp	2.542		Crippen Method
mcvol	141.400	ml/mol	McGowan Method
pc	2635.25	kPa	Joback Method
tb	481.67	K	Joback Method
tc	691.87	K	Joback Method
tf	268.02	K	Joback Method
vc	0.535	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	331.06	J/mol×K	481.67	Joback Method
cpg	349.69	J/mol×K	516.70	Joback Method
cpg	367.08	J/mol×K	551.74	Joback Method
cpg	383.30	J/mol×K	586.77	Joback Method
cpg	398.43	J/mol×K	621.80	Joback Method

cpg	412.53	J/mol×K	656.83	Joback Method
cpg	425.69	J/mol×K	691.87	Joback Method
dvisc	0.0012214	Pa×s	268.02	Joback Method
dvisc	0.0010025	Pa×s	303.63	Joback Method
dvisc	0.0008577	Pa×s	339.24	Joback Method
dvisc	0.0007559	Pa×s	374.85	Joback Method
dvisc	0.0006809	Pa×s	410.45	Joback Method
dvisc	0.0006237	Pa×s	446.06	Joback Method
dvisc	0.0005787	Pa×s	481.67	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	344.00 ± 1.00	K	1.90	NIST Webbook

Sources

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=C877065&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume