

Glycerol, 2-tert-butyl ether

Inchi:	InChI=1S/C7H16O3/c1-7(2,3)10-6(4-8)5-9/h6,8-9H,4-5H2,1-3H3
InchiKey:	GLPNOEXJAWVCEL-UHFFFAOYSA-N
Formula:	C7H16O3
SMILES:	CC(C)(C)OC(CO)CO
Mol. weight [g/mol]:	148.20

Physical Properties

Property code	Value	Unit	Source
gf	-370.18	kJ/mol	Joback Method
hf	-638.52	kJ/mol	Joback Method
hfus	12.31	kJ/mol	Joback Method
hvap	65.26	kJ/mol	Joback Method
log10ws	-0.59		Crippen Method
logp	0.155		Crippen Method
mcvol	127.100	ml/mol	McGowan Method
pc	3476.55	kPa	Joback Method
rinpol	1212.00		NIST Webbook
rinpol	1212.00		NIST Webbook
tb	562.67	K	Joback Method
tc	729.90	K	Joback Method
tf	299.94	K	Joback Method
vc	0.467	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	326.36	J/molxK	562.67	Joback Method
cpg	371.86	J/molxK	702.03	Joback Method
cpg	363.60	J/molxK	674.16	Joback Method
cpg	354.94	J/molxK	646.29	Joback Method
cpg	345.85	J/molxK	618.41	Joback Method
cpg	336.33	J/molxK	590.54	Joback Method
cpg	379.72	J/molxK	729.90	Joback Method
dvisc	0.0000365	Paxs	562.67	Joback Method

dvisc	0.0000751	Paxs	518.88	Joback Method
dvisc	0.0001766	Paxs	475.09	Joback Method
dvisc	0.0004934	Paxs	431.30	Joback Method
dvisc	0.0017395	Paxs	387.52	Joback Method
dvisc	0.0084535	Paxs	343.73	Joback Method
dvisc	0.0651812	Paxs	299.94	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U381763&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

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

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