

cis-2-Methyl-4-tert-butyl-1,3-dioxolane

Inchi:	InChI=1S/C8H16O2/c1-6-9-5-7(10-6)8(2,3)4/h6-7H,5H2,1-4H3
InchiKey:	CVYCFVLBJTXEBR-UHFFFAOYSA-N
Formula:	C8H16O2
SMILES:	CC1OCC(C(C)(C)C)O1
Mol. weight [g/mol]:	144.21
CAS:	26563-82-6

Physical Properties

Property code	Value	Unit	Source
gf	-124.08	kJ/mol	Joback Method
hf	-441.06	kJ/mol	Joback Method
hfus	20.03	kJ/mol	Joback Method
hvap	41.07	kJ/mol	Joback Method
log10ws	-1.72		Crippen Method
logp	1.794		Crippen Method
mcvol	124.460	ml/mol	McGowan Method
pc	2960.12	kPa	Joback Method
tb	443.72	K	Joback Method
tc	649.39	K	Joback Method
tf	242.14	K	Joback Method
vc	0.455	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	279.59	J/molxK	443.72	Joback Method
cpg	356.99	J/molxK	615.11	Joback Method
cpg	343.30	J/molxK	580.83	Joback Method
cpg	328.76	J/molxK	546.55	Joback Method
cpg	313.31	J/molxK	512.28	Joback Method
cpg	296.93	J/molxK	478.00	Joback Method
cpg	369.85	J/molxK	649.39	Joback Method
dvisc	0.0004102	Paxs	443.72	Joback Method
dvisc	0.0005333	Paxs	410.12	Joback Method

dvisc	0.0007266	Paxs	376.53	Joback Method
dvisc	0.0010517	Paxs	342.93	Joback Method
dvisc	0.0016495	Paxs	309.33	Joback Method
dvisc	0.0028872	Paxs	275.74	Joback Method
dvisc	0.0059028	Paxs	242.14	Joback Method

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C26563826&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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