

# 2«alpha»-hydroxy-6«alpha»-hydroxy-trans-decalin

**Inchi:** InChI=1S/C10H18O2/c11-9-3-1-7-5-10(12)4-2-8(7)6-9/h7-12H,1-6H2/t7?,8?,9-,10-/m0/s1  
**InchiKey:** OIXGILBUABDWRY-QLEHZGMVSA-N  
**Formula:** C10H18O2  
**SMILES:** OC1CCC2CC(O)CCC2C1  
**Mol. weight [g/mol]:** 170.25

## Physical Properties

Property code	Value	Unit	Source
gf	-182.64	kJ/mol	Joback Method
hf	-473.91	kJ/mol	Joback Method
hfus	19.84	kJ/mol	Joback Method
hvap	71.11	kJ/mol	Joback Method
log10ws	-2.07		Crippen Method
logp	1.308		Crippen Method
mcvol	141.780	ml/mol	McGowan Method
pc	3460.21	kPa	Joback Method
ripol	1485.00		NIST Webbook
ripol	1485.00		NIST Webbook
ripol	2572.00		NIST Webbook
ripol	2572.00		NIST Webbook
tb	633.78	K	Joback Method
tc	827.44	K	Joback Method
tf	337.42	K	Joback Method
vc	0.513	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	423.20	J/molxK	633.78	Joback Method
cpg	438.69	J/molxK	666.06	Joback Method
cpg	453.30	J/molxK	698.33	Joback Method
cpg	467.05	J/molxK	730.61	Joback Method
cpg	479.97	J/molxK	762.88	Joback Method
cpg	492.10	J/molxK	795.16	Joback Method

cpg	503.46	J/mol×K	827.44	Joback Method
dvisc	0.0173220	Paxs	337.42	Joback Method
dvisc	0.0037869	Paxs	386.81	Joback Method
dvisc	0.0011682	Paxs	436.21	Joback Method
dvisc	0.0004578	Paxs	485.60	Joback Method
dvisc	0.0002133	Paxs	534.99	Joback Method
dvisc	0.0001130	Paxs	584.39	Joback Method
dvisc	0.0000662	Paxs	633.78	Joback Method

## Sources

<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>
<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=R136066&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R136066&amp;Units=SI</a>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>dvisc:</b>	Dynamic viscosity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>rinpol:</b>	Non-polar retention indices
<b>ripol:</b>	Polar retention indices
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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