2«alpha»-hydroxy-6«beta»-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+
InchiKey: OIXGILBUABDWRY-OXYCZDQYSA-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
rinpol	1495.00		NIST Webbook
ripol	2616.00		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/mol×K	633.78	Joback Method
cpg	438.69	J/mol×K	666.06	Joback Method
cpg	453.30	J/mol×K	698.33	Joback Method
cpg	467.05	J/mol×K	730.61	Joback Method
cpg	479.97	J/mol×K	762.88	Joback Method
cpg	492.10	J/mol×K	795.16	Joback Method
cpg	503.46	J/mol×K	827.44	Joback Method
dvisc	0.0173220	Pa×s	337.42	Joback Method

dvisc	0.0037869	Pa×s	386.81	Joback Method
dvisc	0.0011682	Pa×s	436.21	Joback Method
dvisc	0.0004578	Pa×s	485.60	Joback Method
dvisc	0.0002133	Pa×s	534.99	Joback Method
dvisc	0.0001130	Pa×s	584.39	Joback Method
dvisc	0.0000662	Pa×s	633.78	Joback Method

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=R136091&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
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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