2«alpha»-hydroxy-6«alpha»-hydroxy-trans-decali

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
rinpol	1485.00		NIST Webbook
rinpol	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/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

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R136066&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
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

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