2«beta»-hydroxy-6«alpha»-chloro-trans-decalin

Inchi: InChI=1S/C10H17ClO/c11-9-3-1-8-6-10(12)4-2-7(8)5-9/h7-10,12H,1-6H2/t7?,8?,9-,10+/m
InchiKey: RXFQKXWSWHBTLP-HORUIINNSA-N
Formula: C10H17ClO
SMILES: OC1CCC2CC(Cl)CCC2C1
Mol. weight [g/mol]: 188.69

Physical Properties

Property code	Value	Unit	Source
gf	-57.75	kJ/mol	Joback Method
hf	-337.42	kJ/mol	Joback Method
hfus	19.95	kJ/mol	Joback Method
hvap	58.81	kJ/mol	Joback Method
log10ws	-2.95		Crippen Method
logp	2.555		Crippen Method
mcvol	148.150	ml/mol	McGowan Method
pc	2989.32	kPa	Joback Method
rinpol	1505.00		NIST Webbook
rinpol	1505.00		NIST Webbook
ripol	2404.00		NIST Webbook
ripol	2404.00		NIST Webbook
tb	579.03	K	Joback Method
tc	789.70	K	Joback Method
tf	306.52	K	Joback Method
vc	0.543	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	389.86	J/mol×K	579.03	Joback Method
cpg	407.81	J/mol×K	614.14	Joback Method
cpg	424.68	J/mol×K	649.25	Joback Method
cpg	440.50	J/mol×K	684.37	Joback Method
cpg	455.31	J/mol×K	719.48	Joback Method
cpg	469.15	J/mol×K	754.59	Joback Method

cpg	482.06	J/mol×K	789.70	Joback Method
dvisc	0.0104547	Pa×s	306.52	Joback Method
dvisc	0.0036965	Pa×s	351.94	Joback Method
dvisc	0.0016576	Pa×s	397.36	Joback Method
dvisc	0.0008763	Pa×s	442.77	Joback Method
dvisc	0.0005216	Pa×s	488.19	Joback Method
dvisc	0.0003391	Pa×s	533.61	Joback Method
dvisc	0.0002359	Pa×s	579.03	Joback Method

Sources

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=R136195&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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