3-chloro-24-ethyl-«delta»5-Cholestadiene

Inchi: InChI=1S/C29H49Cl/c1-7-21(19(2)3)9-8-20(4)25-12-13-26-24-11-10-22-18-23(30)14-16-
InchiKey: IMWQDSKRNHVSQV-LERVBXDGSA-N
Formula: C29H49Cl
SMILES: CCC(CCC(C)C1CCC2C3CC=C4CC(Cl)CCC4(C)C3CCC12C)C(C)C
Mol. weight [g/mol]: 433.15

Physical Properties

Property code	Value	Unit	Source
gf	342.77	kJ/mol	Joback Method
hf	-397.30	kJ/mol	Joback Method
hfus	37.98	kJ/mol	Joback Method
hvap	81.61	kJ/mol	Joback Method
log10ws	-9.48		Crippen Method
logp	9.271		Crippen Method
mcvol	383.970	ml/mol	McGowan Method
pc	886.83	kPa	Joback Method
rinpol	3300.00		NIST Webbook
tb	937.95	K	Joback Method
tc	1165.45	K	Joback Method
tf	504.03	K	Joback Method
vc	1.458	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1400.37	J/mol×K	937.95	Joback Method
cpg	1432.75	J/mol×K	975.87	Joback Method
cpg	1465.43	J/mol×K	1013.78	Joback Method
cpg	1498.79	J/mol×K	1051.70	Joback Method
cpg	1533.17	J/mol×K	1089.62	Joback Method
cpg	1568.92	J/mol×K	1127.54	Joback Method
cpg	1606.39	J/mol×K	1165.45	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R162991&Units=SI

Legend

cpg:	Ideal gas heat capacity
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume