

# Epicholesterol

<b>Other names:</b>	Cholestan-3-ol, (3«alpha»,5«alpha»)-5«alpha»-Cholestan-3«alpha»-ol Cholestan-3«alpha»-ol Epidehydrocholesterin
<b>Inchi:</b>	InChI=1S/C27H48O/c1-18(2)7-6-8-19(3)23-11-12-24-22-10-9-20-17-21(28)13-15-26(20,4
<b>InchiKey:</b>	QYIXCDOBOSTCEI-WXXXDBQUSA-N
<b>Formula:</b>	C27H48O
<b>SMILES:</b>	CC(C)CCCC(C)C1CCC2C3CCC4CC(O)CCC4(C)C3CCC12C
<b>Mol. weight [g/mol]:</b>	388.67
<b>CAS:</b>	516-95-0

## Physical Properties

Property code	Value	Unit	Source
gf	175.44	kJ/mol	Joback Method
hf	-553.88	kJ/mol	Joback Method
hfus	36.46	kJ/mol	Joback Method
hvap	88.57	kJ/mol	Joback Method
log10ws	-7.90		Crippen Method
logp	7.469		Crippen Method
mcvol	353.720	ml/mol	McGowan Method
pc	1041.25	kPa	Joback Method
rinpol	3100.00		NIST Webbook
tb	938.57	K	Joback Method
tc	1157.43	K	Joback Method
tf	509.87	K	Joback Method
vc	1.335	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1349.43	J/molxK	938.57	Joback Method
cpg	1380.08	J/molxK	975.05	Joback Method
cpg	1410.98	J/molxK	1011.52	Joback Method
cpg	1442.45	J/molxK	1048.00	Joback Method

cpg	1474.79	J/mol×K	1084.48	Joback Method
cpg	1508.30	J/mol×K	1120.95	Joback Method
cpg	1543.29	J/mol×K	1157.43	Joback Method

## Sources

<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=C516950&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C516950&amp;Units=SI</a>
<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>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<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>mvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>rinpol:</b>	Non-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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