

Cholesteryl palmitate

Other names:	Cholesterol palmitate Cholest-5-en-3-ol (3«beta»)-, hexadecanoate Cholesteryl hexadecanoate Hexadecanoic acid, cholesteryl ester 3«beta»-Hexadecanoyloxycholest-5-ene cholest-5-ene-3-beta-yl palmitate
Inchi:	InChI=1S/C43H76O2/c1-7-8-9-10-11-12-13-14-15-16-17-18-19-23-41(44)45-36-28-30-42
InchiKey:	BBJQPKLGPMQWBU-LWDBVXGGSA-N
Formula:	C43H76O2
SMILES:	CCCCCCCCCCCCCCCC(=O)OC1CCC2(C)C(=CCC3C2CCC2(C)C(C(C)CCCC(C)C)C
Mol. weight [g/mol]:	625.06
CAS:	601-34-3

Physical Properties

Property code	Value	Unit	Source
gf	241.10	kJ/mol	Joback Method
hf	-910.04	kJ/mol	Joback Method
hfus	76.36	kJ/mol	Joback Method
hvap	117.93	kJ/mol	Joback Method
log10ws	-14.30		Crippen Method
logp	13.421		Crippen Method
mcvol	576.430	ml/mol	McGowan Method
pc	467.09	kPa	Joback Method
tb	1297.57	K	Joback Method
tc	1656.43	K	Joback Method
tf	353.00 ± 0.50	K	NIST Webbook
vc	2.223	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	2537.13	J/molxK	1297.57	Joback Method
cpg	2623.51	J/molxK	1357.38	Joback Method
cpg	2717.91	J/molxK	1417.19	Joback Method

cpg	2821.83	J/mol×K	1477.00	Joback Method
cpg	2936.79	J/mol×K	1536.81	Joback Method
cpg	3064.29	J/mol×K	1596.62	Joback Method
cpg	3205.83	J/mol×K	1656.43	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C601343&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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