

Cholan-24-oic acid, 3,12-dioxo-, methyl ester, (5«alpha»)-

Other names:	Methyl 5-«beta»-cholan-3,12-dione-24-oate
Inchi:	InChI=1S/C25H38O4/c1-15(5-10-23(28)29-4)19-8-9-20-18-7-6-16-13-17(26)11-12-24(16)
InchiKey:	VCWDOHJFKGOMRJ-HHHNRTIISA-N
Formula:	C25H38O4
SMILES:	COC(=O)CCC(C)C1CCC2C3CCC4CC(=O)CCC4(C)C3CC(=O)C12C
Mol. weight [g/mol]:	402.57
CAS:	1174-86-3

Physical Properties

Property code	Value	Unit	Source
gf	-173.53	kJ/mol	Joback Method
hf	-854.95	kJ/mol	Joback Method
hfus	31.45	kJ/mol	Joback Method
hvap	85.79	kJ/mol	Joback Method
log10ws	-5.36		Crippen Method
logp	4.983		Crippen Method
mcvol	330.250	ml/mol	McGowan Method
pc	1224.27	kPa	Joback Method
rinpol	3281.00		NIST Webbook
rinpol	3281.00		NIST Webbook
tb	1017.67	K	Joback Method
tc	1264.96	K	Joback Method
tf	654.35	K	Joback Method
vc	1.248	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1291.03	J/mol×K	1017.67	Joback Method
cpg	1321.80	J/mol×K	1058.89	Joback Method
cpg	1353.00	J/mol×K	1100.10	Joback Method
cpg	1384.95	J/mol×K	1141.32	Joback Method
cpg	1417.98	J/mol×K	1182.53	Joback Method
cpg	1452.40	J/mol×K	1223.75	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1174863&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

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

Latest version available from:

<https://www.chemeo.com/cid/86-681-1/Cholan-24-oic-acid-3-12-dioxo-methyl-ester-5-alpha.pdf>

Generated by Cheméo on 2025-12-24 00:19:47.098625587 +0000 UTC m=+6283784.628666251.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.