Retinol

Other names:

Vitamin A1
Retinol, all-trans-
«beta»-Retinol
All-trans-Retinol
All-trans-Retinyl alcohol
All-trans-Vitamin A alcohol
trans-Retinol
trans-Vitamin A alcohol
A-Mulsal
A-Vi-Pel
Acon
Afaxin
Agiolan
Agoncal
Alcovit A
Alphalin
Alphasterol
Anatola
Anatola A
anti-Infective Vitamin
Antixerophthalmic vitamin
Aoral
Apexol
Apostavit
Aquasynth
Atav
Avibon
Avita
Avitol
Axerol
Axerophthol
Bentavit A
Biosterol
Chocola A
Disatabs Tabs
Dofsol
Dohyfral A
Epiteliol
Hi-A-Vita
Lard Factor

Myvpack
Nio-A-Let
Oleovitamin A
Ophthalamin
Plivit A
Prepalin
Testavol
Vaflol
Veroftal
Vi-«alpha»
Vitamin A alcohol
Vitamin A alcohol, all-trans-
Vitamin A1 alcohol
Vitamin A1 alcohol, all-trans-
Vitamin A1, all-trans-
Vitavel A
Vitpex
Vogan
Vogan-Neu
2,4,6,8-Nonatetraen-1-ol, 3,7-dimethyl-9-(2,6,6-trimethyl-1-cyclohexen-1-yl)-, (all-E)-
all-trans-Vitamin A
A-Sol
A-Vitan
Aquasol A
Atars
Del-VI-A
Homagenets Aoral
Retrovitamin A
Sehkraft A
Solu-A
Super A
Testavol S
Vafol
Vi-Dom-A
Vio-A
Vitamin A
3,7-Dimethyl-9-(2,6,6-trimethyl-1-cyclohexen-1-yl)-2,4,6,8-nonatetraen-1-ol, all (E)-
Ro-a-vit
Vi-alpha
all-trans-Vitamin A1
(all-E)-3,7-Dimethyl-9-(2,6,6-trimethyl-1-cyclohexen-1-yl)-2,4,6,8-nonatetraen-1-ol
Retinyl A
Tegosphere VitA

	Thalasphere
Inchi:	InChI=1S/C20H30O/c1-16(8-6-9-17(2)13-15-21)11-12-19-18(3)10-7-14-20(19,4)5/h6,8-9
InchiKey:	FPIPGXGPPPQFEQ-OVSJKPMPSA-N
Formula:	C20H30O
SMILES:	CC(C=CC1=C(C)CCCC1(C)C)=CC=CC(C)=CCO
Mol. weight [g/mol]:	286.45
CAS:	68-26-8

Physical Properties

Property code	Value	Unit	Source
gf	314.14	kJ/mol	Joback Method
hf	-54.66	kJ/mol	Joback Method
hfus	35.81	kJ/mol	Joback Method
hvap	77.68	kJ/mol	Joback Method
log10ws	-6.38		Crippen Method
logp	5.510		Crippen Method
mcvol	266.170	ml/mol	McGowan Method
pc	1511.67	kPa	Joback Method
tb	794.49	K	Joback Method
tc	1002.31	K	Joback Method
tf	384.82	K	Joback Method
vc	1.014	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	794.47	J/mol×K	794.49	Joback Method
cpg	813.09	J/mol×K	829.13	Joback Method
cpg	831.29	J/mol×K	863.76	Joback Method
cpg	849.23	J/mol×K	898.40	Joback Method
cpg	867.07	J/mol×K	933.04	Joback Method
cpg	885.01	J/mol×K	967.68	Joback Method
cpg	903.20	J/mol×K	1002.31	Joback Method

Sources

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=C68268&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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