Norethindrone

Other names:

(17-«alpha»)-17-Hydroxy-19-norpregn-4-en-20-yn-3-one
(17-Â«alphaÂ»)-17-Hydroxy-19-norpregn-4-en-20-yn-3-one
17-Ethinyl-19-nor-testosterone
17-Hydroxy-17-«alpha»-19-norpregn-4-en-20-yn-3-one
17-Hydroxy-17-Â«alphaÂ»-19-norpregn-4-en-20-yn-3-one
17-Hydroxy-19-nor-17«alpha»-pregn-4-en-20-yn-3-one
17-Hydroxy-19-nor-17Â«alphaÂ»-pregn-4-en-20-yn-3-one
17-«alpha»-19-Norpregn-4-en-20-yn-3-one, 17-hydroxy-
17-«alpha»-Ethynyl-17-«beta»-hydroxy-4-estren-3-one
17-Â«alphaÂ»-19-Norpregn-4-en-20-yn-3-one, 17-hydroxy-
17-Â«alphaÂ»-Ethynyl-17-Â«betaÂ»-hydroxy-4-estren-3-one
17«alpha»-Ethinyl-17«beta»-hydroxy-«delta»(sup:4)-estren-3-one
17«alpha»-Ethinyl-19-Nortestosterone
17«alpha»-Ethinylestra-4-en-17«beta»-ol-3-one
17«alpha»-Ethynyl-17-hydroxy-4-estren-3-one
17«alpha»-Ethynyl-17-hydroxyest-4-en-3-one
17«alpha»-Ethynyl-17«beta»-hydroxy-19-norandrost-4-en-3-one
17«alpha»-Ethynyl-17«beta»-hydroxyestr-4-en-3-one
17«alpha»-Ethynyl-19-nor-4-androsten-17«beta»-ol-3-one
17«alpha»-Ethynyl-19-norandrost-4-en-17«beta»-ol-3-one
17«alpha»-Ethynyl-19-nortestosterone
17«alpha»-Ethynyl-3-oxo-4-estren-17«beta»-ol
17«alpha»-Ethynyl-4-estren-17-ol-3-one
17«beta»-Hydroxy-17«alpha»-ethynylestr-4-en-3-one
17«beta»-Hydroxy-19-norpregn-4-en-20-yn-3-one
17Â«alphaÂ»-Ethinyl-17Â«betaÂ»-hydroxy-Â«deltaÂ»(sup:4)-estren-3-one
17Â«alphaÂ»-Ethinyl-19-Nortestosterone
17Â«alphaÂ»-Ethinylestra-4-en-17Â«betaÂ»-ol-3-one
17Â«alphaÂ»-Ethynyl-17-hydroxy-4-estren-3-one
17Â«alphaÂ»-Ethynyl-17-hydroxyest-4-en-3-one
17Â«alphaÂ»-Ethynyl-17Â«betaÂ»-hydroxy-19-norandrost-4-en-3-one
17Â«alphaÂ»-Ethynyl-17Â«betaÂ»-hydroxyestr-4-en-3-one
17Â«alphaÂ»-Ethynyl-19-nor-4-androsten-17Â«betaÂ»-ol-3-one
17Â«alphaÂ»-Ethynyl-19-norandrost-4-en-17Â«betaÂ»-ol-3-one
17Â«alphaÂ»-Ethynyl-19-nortestosterone
17Â«alphaÂ»-Ethynyl-3-oxo-4-estren-17Â«betaÂ»-ol
17Â«alphaÂ»-Ethynyl-4-estren-17-ol-3-one
17Â«betaÂ»-Hydroxy-17Â«alphaÂ»-ethynylestr-4-en-3-one
17Â«betaÂ»-Hydroxy-19-norpregn-4-en-20-yn-3-one
19-Nor-17-ethinyltestosterone

19-Nor-17«alpha»-ethynyltestosterone
19-Nor-17«alpha»-pregn-4-en-20-yn-3-one, 17-hydroxy-
19-Nor-17Â«alphaÂ»-ethynyltestosterone
19-Nor-17Â«alphaÂ»-pregn-4-en-20-yn-3-one, 17-hydroxy-
19-Nor-ethindrone
19-Norandrost-4-en-3-one, 17«alpha»-ethynyl-17«beta»-hydroxy-
19-Norandrost-4-en-3-one, 17Â«alphaÂ»-ethynyl-17Â«betaÂ»-hydroxy-
19-Norethinyltestosterone
19-Norethisterone
19-Norpregn-4-en-20-yn-3-one, 17-hydroxy-, (17«alpha»)-
19-Norpregn-4-en-20-yn-3-one, 17-hydroxy-, (17Â«alphaÂ»)-
19-Nortestosterone, 17-ethynyl-
19-nor-17«alpha»-Ethynyl-17«beta»-hydroxy-4-androsten-3-one
19-nor-17«alpha»-Ethynylandrosten-17«beta»-ol-3-one
19-nor-17Â«alphaÂ»-Ethynyl-17Â«betaÂ»-hydroxy-4-androsten-3-one
19-nor-17Â«alphaÂ»-Ethynylandrosten-17Â«betaÂ»-ol-3-one
4-Estren-17«alpha»-ethynyl-17«beta»-ol-3-one
4-Estren-17Â«alphaÂ»-ethynyl-17Â«betaÂ»-ol-3-one
Anhydrohydroxynorprogesterone
Anovule
Conludaf
Conludag
ENT
Estr-4-en-3-one, 17«alpha»-ethynyl-17-hydroxy-
Estr-4-en-3-one, 17Â«alphaÂ»-ethynyl-17-hydroxy-
Ethinyl-19-nortestosterone
Ethinylnortestosterone
Ethynylnortestosterone
Gestest
Menzol
Micronett
Micronor
Micronovum
Mini-Pe
Mini-pill
Minovlar
NET
NSC-9564
Nor-Q.D.
Nor-QD
Noralutin
Norcolut
Noresthisterone

Norethisteron
Norethisterone
Norethyndron
Norethynodrone
Norfor
Norgestin
Norluten
Norlutin
Norluton
Normapause
Norpregneninlone
Norpregneninolone
Primolut N
Proluteasi
SC 4640
Utovlan
Utovlar

Inchi: InChI=1S/C20H26O2/c1-3-20(22)11-9-18-17-6-4-13-12-14(21)5-7-15(13)16(17)8-10-19(1

InchiKey: VIKNJXKGJWUCNN-BROHZWGRSA-N

Formula: C20H26O

SMILES: C#CC1(O)CCC2C3CCC4=CC(=O)CCC4C3CCC21C

Mol. weight [g/mol]: 282.42

CAS: 68-22-4

Physical Properties

Property code	Value	Unit	Source
gf	257.61	kJ/mol	Joback Method
hf	-157.65	kJ/mol	Joback Method
hfus	26.55	kJ/mol	Joback Method
hvap	79.44	kJ/mol	Joback Method
log10ws	-4.71		Aqueous Solubility Prediction Method
logp	3.493		Crippen Method
mcvol	243.760	ml/mol	McGowan Method
pc	2117.78	kPa	Joback Method
rinpol	2625.00		NIST Webbook
tb	850.71	K	Joback Method
tc	1095.99	K	Joback Method
tf	476.65	K	Aqueous Solubility Prediction Method

tf	479.00 ± 1.00	K	NIST Webbook
tf	481.00 ± 1.00	K	NIST Webbook
vc	0.911	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	843.25	J/mol×K	850.71	Joback Method
cpg	867.22	J/mol×K	891.59	Joback Method
cpg	891.39	J/mol×K	932.47	Joback Method
cpg	916.13	J/mol×K	973.35	Joback Method
cpg	941.82	J/mol×K	1014.23	Joback Method
cpg	968.83	J/mol×K	1055.11	Joback Method
cpg	997.53	J/mol×K	1095.99	Joback Method
hfust	39.60	kJ/mol	479.00	NIST Webbook
hfust	39.60	kJ/mol	479.00	NIST Webbook
sfust	82.70	J/mol×K	479.00	NIST Webbook

Sources

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Joback Method: https://en.wikipedia.org/wiki/Joback_method

Aqueous Solubility Prediction Method: http://onschallenge.wikispaces.com/file/view/AqueousDataset002.xlsx/351826032/AqueousDa

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C68224&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

hfust: Enthalpy of fusion at a given temperature

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
sfust:	Entropy of fusion at a given temperature
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume