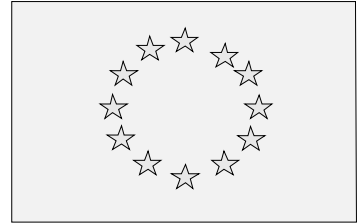


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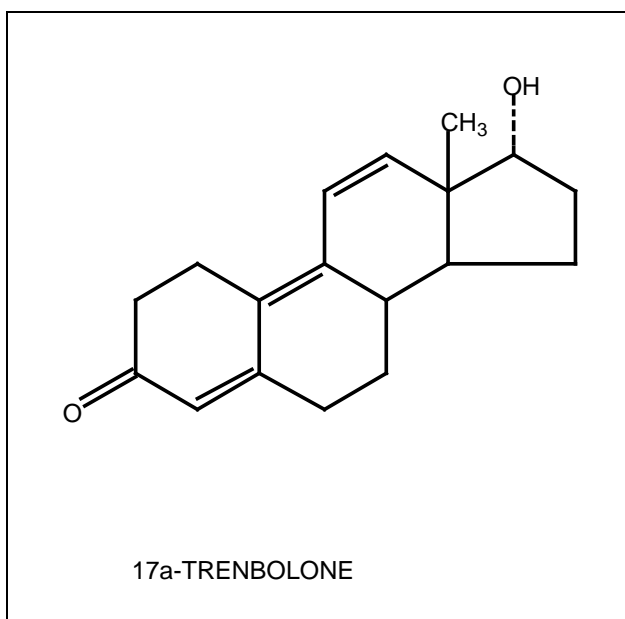
Datasheet 17 α -Trenbolone

Reference number : EU/CRL: 57

Date of preparation : 2003.11.15

source : NARL

“Bank of Reference Standards”



Molecular structure of 17 α -trenbolone

Name : 17 α -hydroxy-estra-4,9,11-trien-3-one
Synonym : 17 α -trenbolone
Molecular formula : C₁₈H₂₂O₂
CAS # : 80657-17-6
Molecular weight : 270.4
Indication of purity : > 95 %

Last update : 2004.02.17

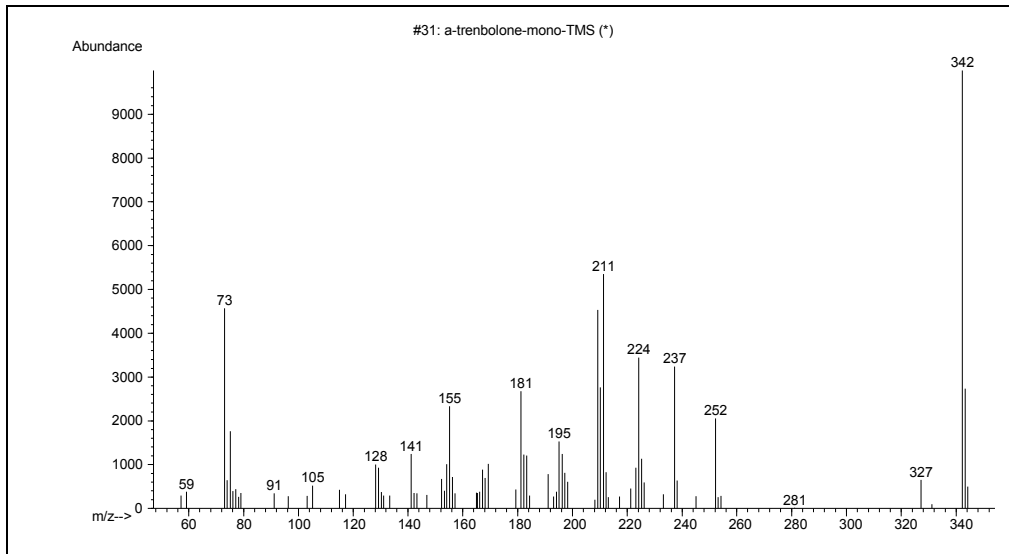
Methods used for characterization:

- I** **Mass spectrometry**
- II** **HPLC-UV spectroscopy and UV-scan**
- III** **IR spectroscopy**
- IV** **Homogeneity and stability obtained with GC-MS**

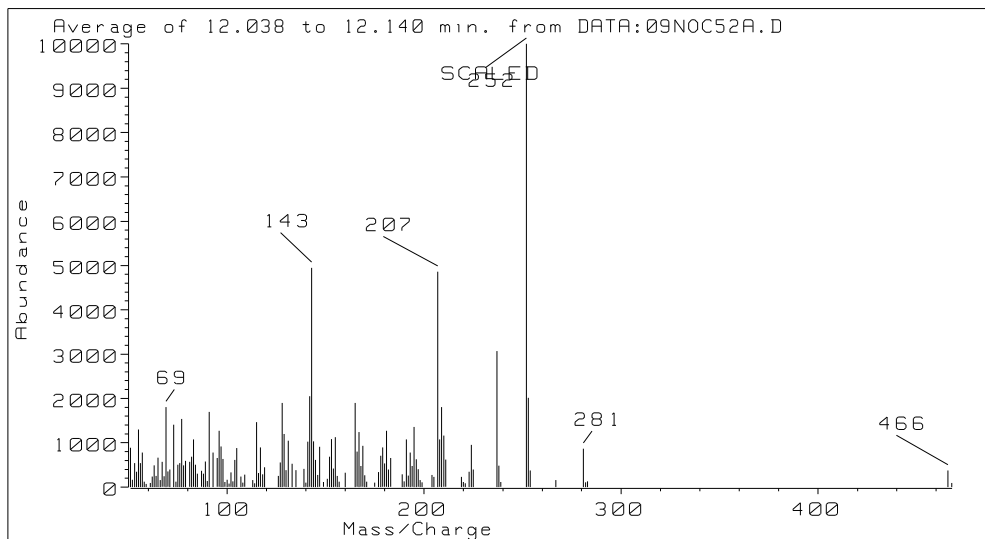
I MASS-SPECTROMETRY

Instrument: Hewlett Packard 5989A MS

MS spectrum, full scan

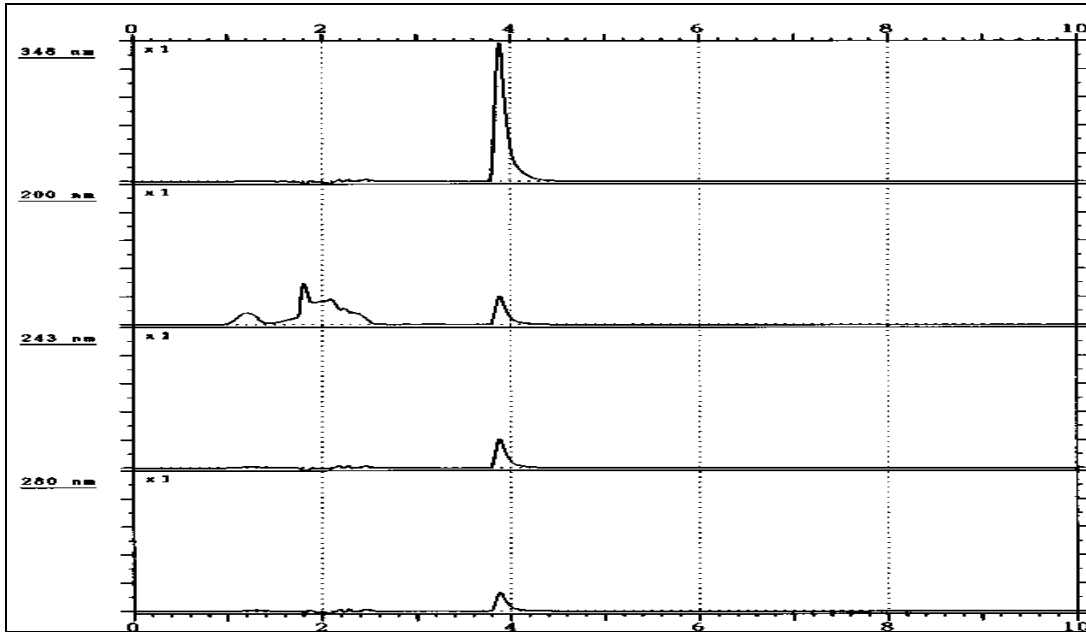


Mass spectrum (EI) of α -trenbolone-mono-TMS (derivatized with BSTFA + 1% TMCS)



Mass spectrum (EI) of α -trenbolone-mono-HFB (derivatized with HFBA/Aceton (1:4))

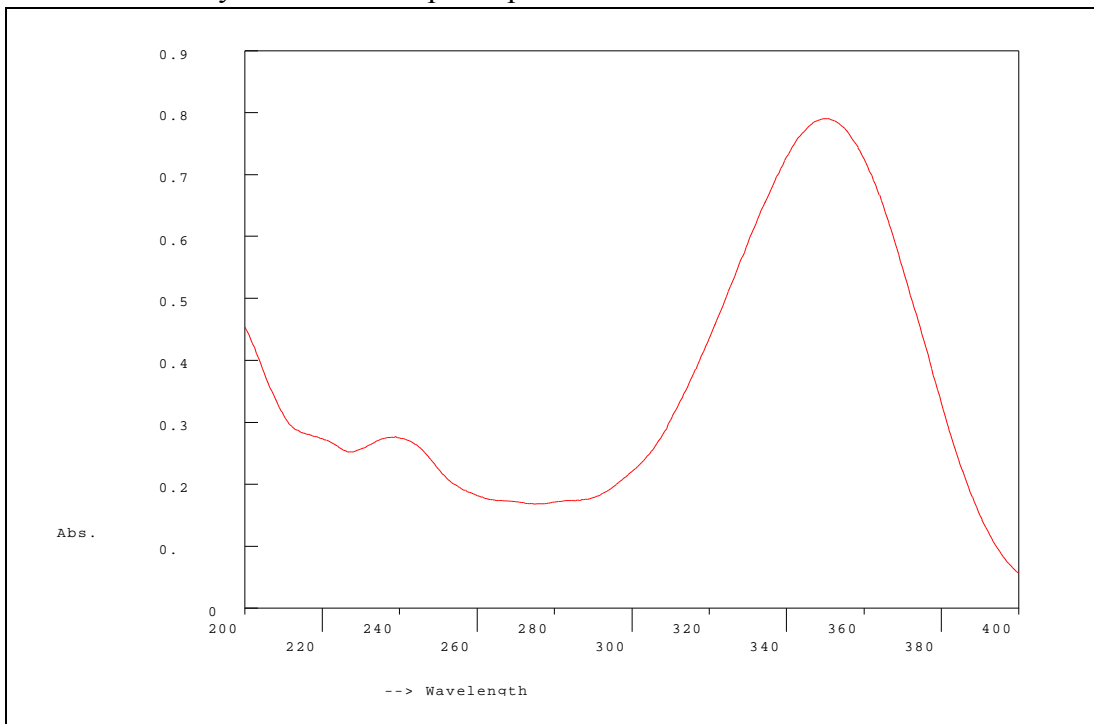
II HPLC-UV SPECTROSCOPY AND UV-SCAN



HPLC-UV of α -trenbolone

UV-scan of α -trenbolone

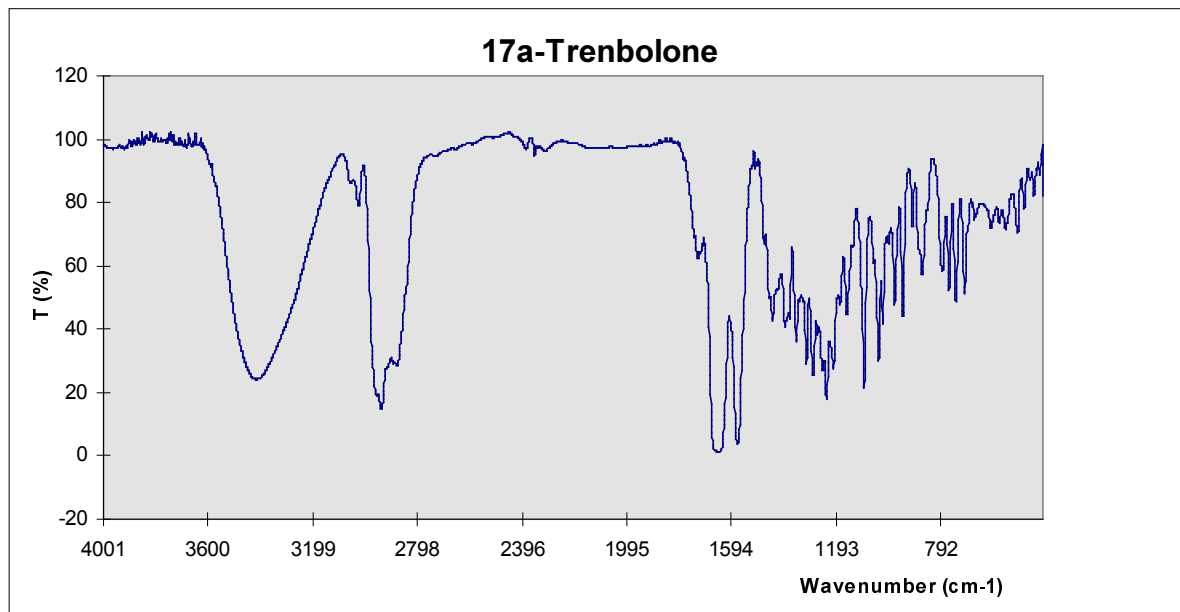
Instrument : Cary 3 UV-visible spectrophotometer



III IR SPECTROSCOPY

Instrument: Bruker IFS-55 FTIR ; detector DTGS

Sampling technique: KBr-tablet.

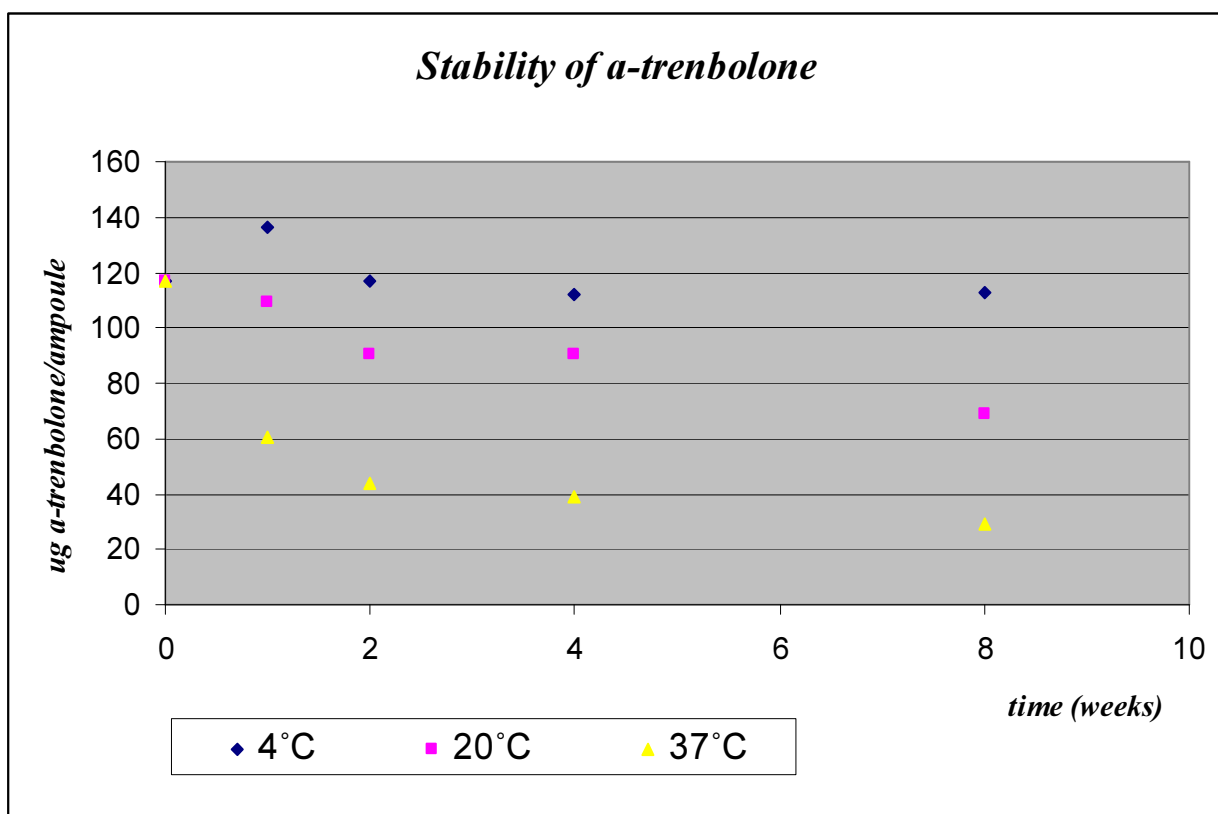


IV HOMOGENEITY AND STABILITY

The homogeneity of the ampoules was tested at random. All tested ampoules contained 100 µg 17α-trenbolone.

During 8 weeks the stability of the ampoules was tested. The ampoules were stored at 3 different temperatures during 1, 2, 4 and 8 weeks and afterwards the concentration of 17α-trenbolone was measured. The results are given in the tables below.

| <i>µg 17α-trenbolone/ampoule at different temperatures:</i> | | | |
|---|-------------|--------------|--------------|
| <i>time (weeks)</i> | <i>4 °C</i> | <i>20 °C</i> | <i>37 °C</i> |
| 0 | 117 | 117 | 117 |
| 1 | 136 | 109 | 60 |
| 2 | 117 | 91 | 44 |
| 4 | 112 | 90 | 39 |
| 8 | 113 | 69 | 29 |



It may be clear that 17α-trenbolone is not stable, not even at 4°C. The ampoules should be stored in the freezer, just like solutions prepared from the ampoules.

It is also advisable to keep ampoules and solutions of 17α-trenbolone in the dark as much as possible because the chemical is sensitive to light.