

Datasheet Chlormadinone-³⁷Cl

Reference number : CEC/MAT : 18

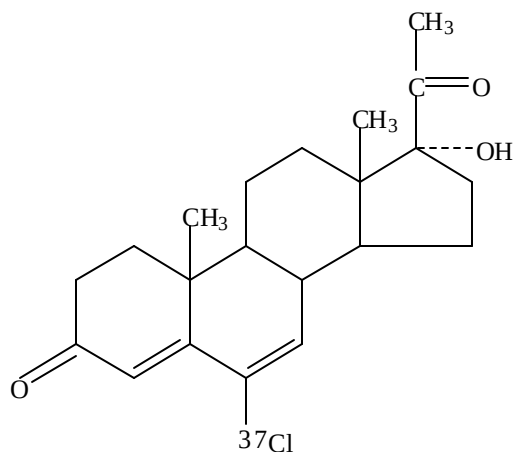
Date of preparation: 1995.05.22

date : 17 January 2003

source : MAT - RIVM

“Bank of Reference Standards”

**The Bank of Reference Standards was financially supported by the European Commission
Directorate General “Science, Research and Development DG XII”
Contract MAT 1 - CT92 - 0020**



CHLORMADINONE- ³⁷Cl

Name : 6-³⁷Chloro-17-hydroxy-pregna-4,6-diene-3,20-dione
 Synonym : chlormadinone-³⁷Cl
 Molecular formula : C₂₁H₂₇O₃³⁷Cl
 Cas # : not available
 Molecular weight : 364.41

Long term stability tested on 1997.10.01 : 100.2 ± 11.7 %
 (storage 4°C, analysis HPLC-UV, 6 tests on 2 ampoules)

Date : 1998.01.06

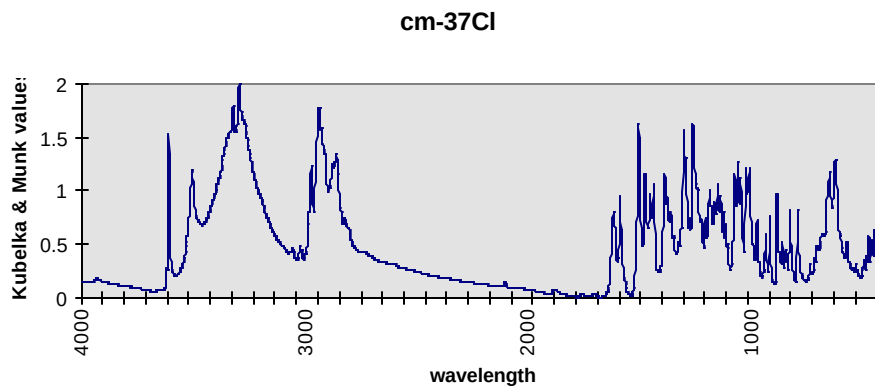
Methods used for characterization

- I IR spectroscopy**
- II Mass spectrometry**
- III HPLC-UV spectroscopy**
- IV ¹H-NMR spectroscopy**
- V Homogeneity and stability obtained with HPLC**

I IR-SPECTROSCOPY

Instrument: Bruker IFS-55; detector DTGS

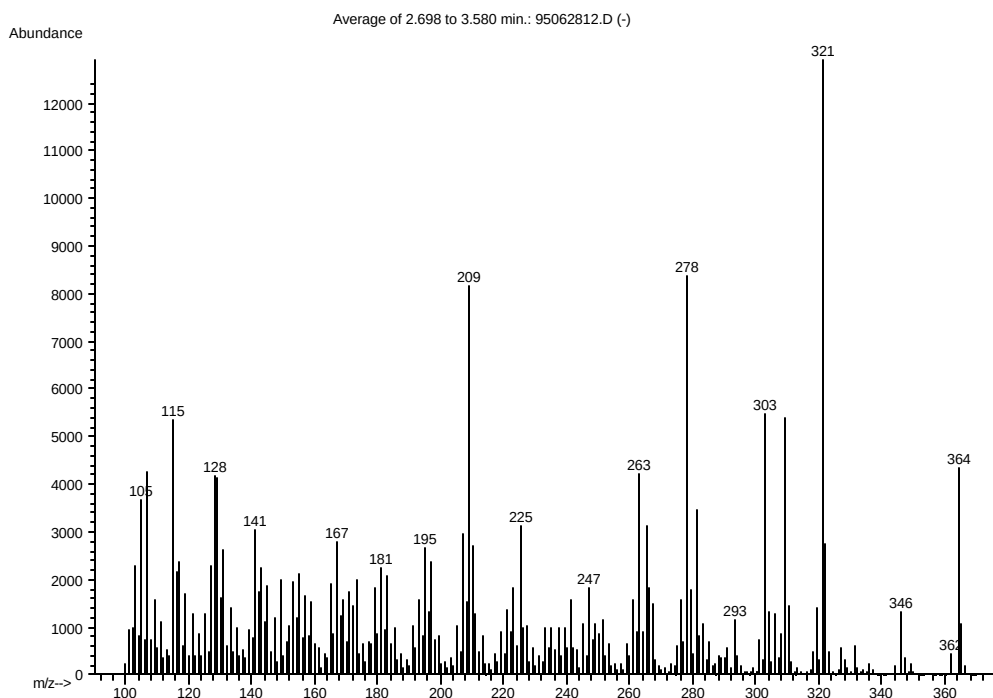
Sampling technique: KBr-tablet.



II MASS-SPECTROMETRY

Instrument: Hewlett Packard 5989 A MS

MS- spectrum, DIP = direct inlet probe

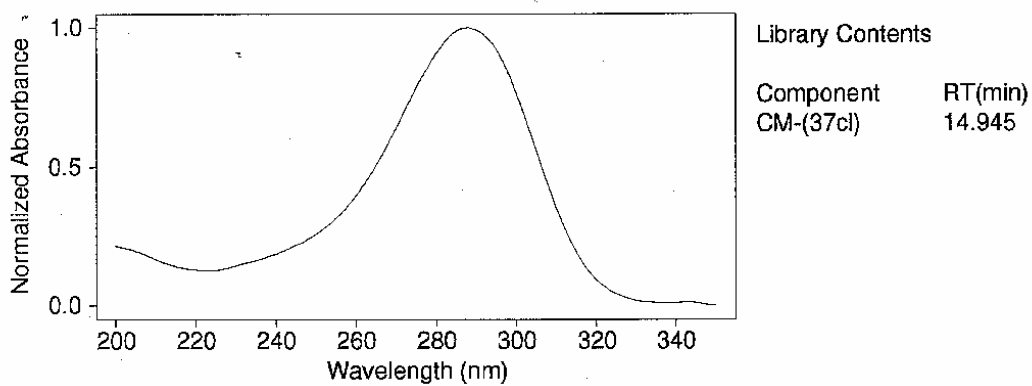


III HPLC-UV SPECTROSCOPY

Instrument: TSP spectrasystem UV2000; resolution 2nm.

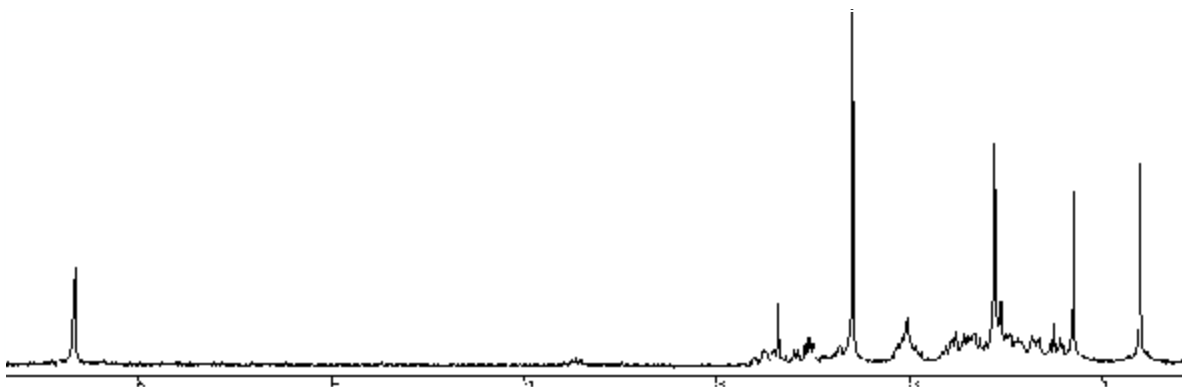
HPLC eluens: methanol/water (70:30 v/v)

HPLC column: Lichrocart 125-4 hplc cartridge



IV ¹H-NMR SPECTROMETRY

Instrument: FT-NMR Jeol GSX; 270 MHz, 5 mm probe, solvent CDCl₃



Chemical shifts (ppm)	Aantal protonen (multipliciteit)	Toekenning
0.91	3 (s)	18-CH ₃
1.15	3 (s)	19-CH ₃
2.30	3 (s)	21-CH ₃
6.35	2 (m)	4-H en 7-H

* ethanol was found (1.1 en 3.6 ppm), used as solvent during ampouling.

V HOMOGENEITY AND STABILITY

Stability and homogeneity test of Chlormadionone-³⁷Cl

CEC/ MAT: 18

temp.	t= 0 months homogeneity (n = 10) µg (m ± SD)	t=1,5 months (n = 2) µg (m ± SD)	t = 3 months (n = 2) µg (m ± SD)	t = 6 months (n = 2) µg (m ± SD)	t= 12 months (n = 2) µg (m ± SD)
4°C	(105 ± 2)	(107 ± 2)			
20°C		(106 ± 1)			
37°C		(102 ± 1)			

