National Institute
for Public Health and
the Environment

Datasheet ß-Zearalenol-D4

Reference number : EU/CRL: 49

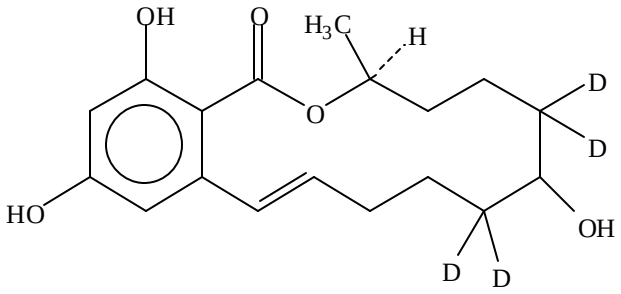
Date of preparation : 1997.05.22

date : 17 January 2003

source : 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



b-ZEARALENOL-d4

Name : 2,4-dihydroxy-6,[6ß, 10-dihydroxy trans-1-undecenyl] benzoic acid µ lactone
Synonym : ß-Zearalenol-D4
Molecular formula : $C_{18}H_{20}D_4O_5$
Cas # : not available
Moleculair weight : 324.2
Indication of purity: > 95 %

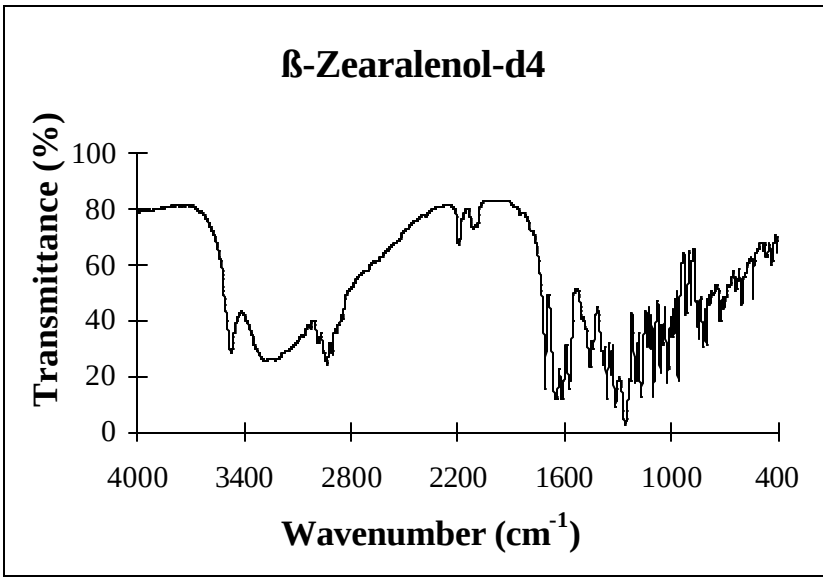
Last update : 1998.01.06

Methods used for characterization

I IR spectroscopy
II UV spectroscopy
III Mass spectrometry
IV Mass spectrometry after TMS derivatisation

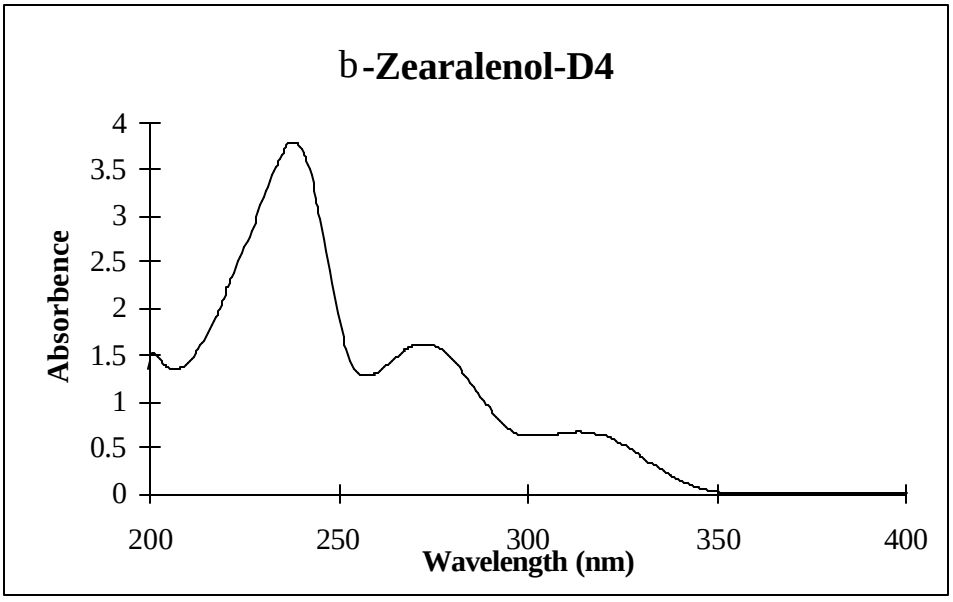
I IR-SPECTROSCOPY

Instrument: Bruker IFS-55 FTIR; detector DTGS
Sampling technique: KBr-tablet.



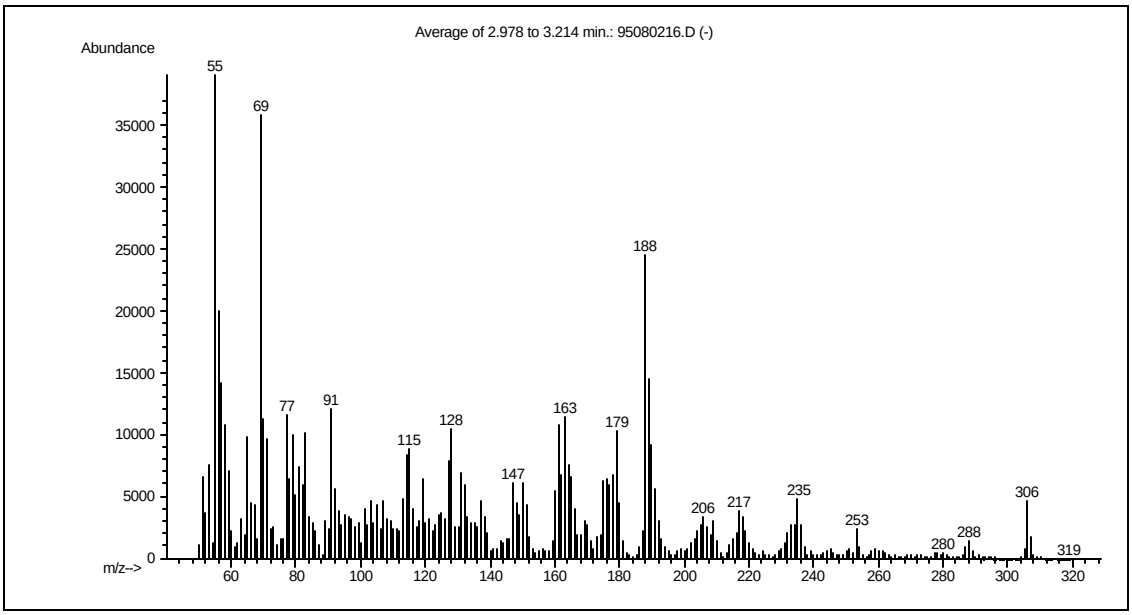
II UV SPECTROSCOPY

Instrument: Cary 3 UV-Visible Spectrophotometer.
Concentration ß-zearalenol-D4 = 0.154 mM ; solvent : methanol
$\varepsilon_{313.0\ nm}$ = 4390
$\varepsilon_{273.5\ nm}$ = 10410



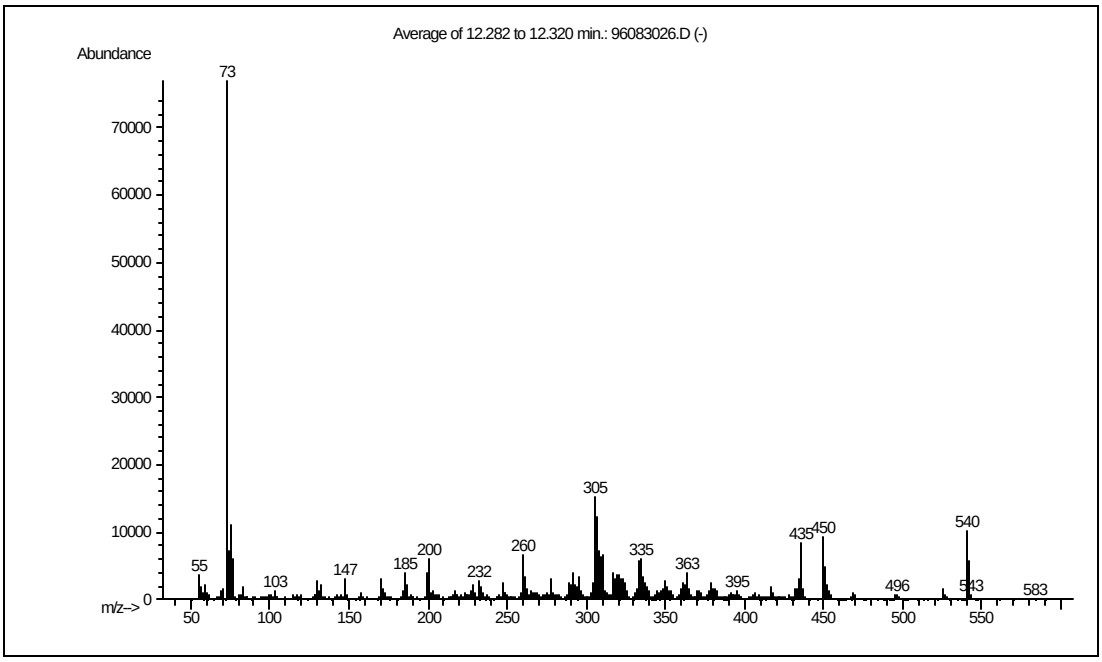
III MASS-SPECTROMETRY

Instrument: Hewlett Packard 5989 A MS
GC-MS spectrum, DIP = direct inle t probe



IV MASS-SPECTROMETRY AFTER TMS DERIVATISATION

Instrument: Hewlett Packard 5970 MSD
MS spectrum, Full Scan (EI)



Full scan (EI) : ß-Zearalenol-D4 derivatized with MSTFA