

Application Note No. 060

Analysis of the Nicotine content in Tobacco by Focus Direct TD-GC/MS

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- Direct desorption from sample matrix to column
- No manual sample preparation
- May be automated using the Focus and LINEX

Instrumentation

- Optic 2-200 programmable injector
- Focus Direct-TD automated thermal desorber
- ATAS SepLiner
- Agilent 6890 GC
- Agilent 5973 MSD

Sample analysed

Nicotine in tobacco leaves (for the cigar industry)

Principles

- Weigh tobacco sample into the SepLiner
- Cap the liner and place into the Focus Direct-TD sample tray
- Place SepLiner automatically into the Optic injector
- Purge the SepLiner with carrier gas
- Desorb the nicotine from the tobacco, transfer directly to the capillary GC column and start the GC-MS analysis
- · After analysis and cooling the GC oven automatically remove the SepLiner and place next one for analysis

Chromatogram

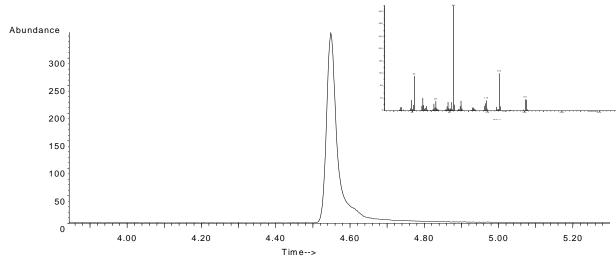


Figure: Extracted ion (m/z=84) DTD-GC/MS chromatogram of tobacco and mass spectrum of peak (Nicotine) For more information please contact us at one of the addresses below.