

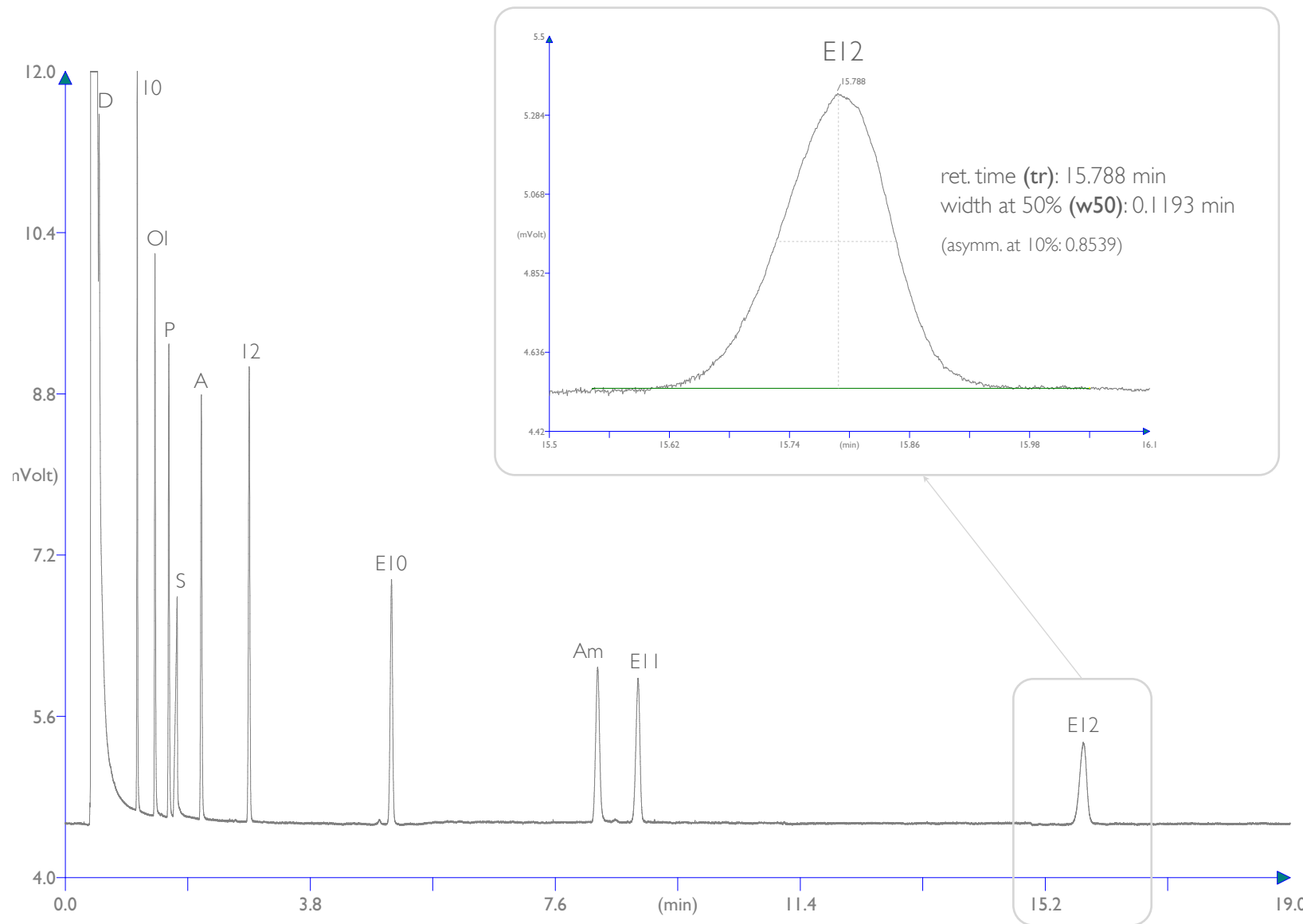
unsurpassed
INERTNESS

Even with a thin film thickness on a narrow bore I.D. tubing, all MEGA FAST-GC columns maintain a perfect peak shape also for most active compounds.

Every MEGA columns are tested one-by-one with the original Grob Test mixture, thus to prove the high quality, in terms of inertness, of our surface treatments.

Column: **MEGA-5 FAST - 0.10mm, 0.20 μ m, 10m**
Catalog Code: F-5-010-020-10

Figure 1. Grob Test chromatogram performed with the MEGA-5 FAST, 0.10mm, 0.20 μ m, 10m. The test conditions were: 40°C - 180°C @ 10°C/min, Hydrogen carrier gas @ 180kPa (constant pressure), Split injector (250°C) with split ratio 1:40, 0.5 μ L injection volume, FID detector (250°C). Grob Test Mix (Fluka cat. # 86501) composition: 2,3-Butanediol (D), Decane (10), 1-Octanol (OI), 2,6-Dimethylphenol (P), 2-Ethylcaproic acid (S), 2,6-Dimethylaniline (A), Dodecane (12), methyl Decanoate (E10), Dicyclohexylamine (Am), methyl Undecanoate (E11), methyl Laurate (E12).



unsurpassed
EFFICIENCY

Even with a slightly peak overloading, calculating the efficiency of the column with the plates calculation formula in isothermal mode:

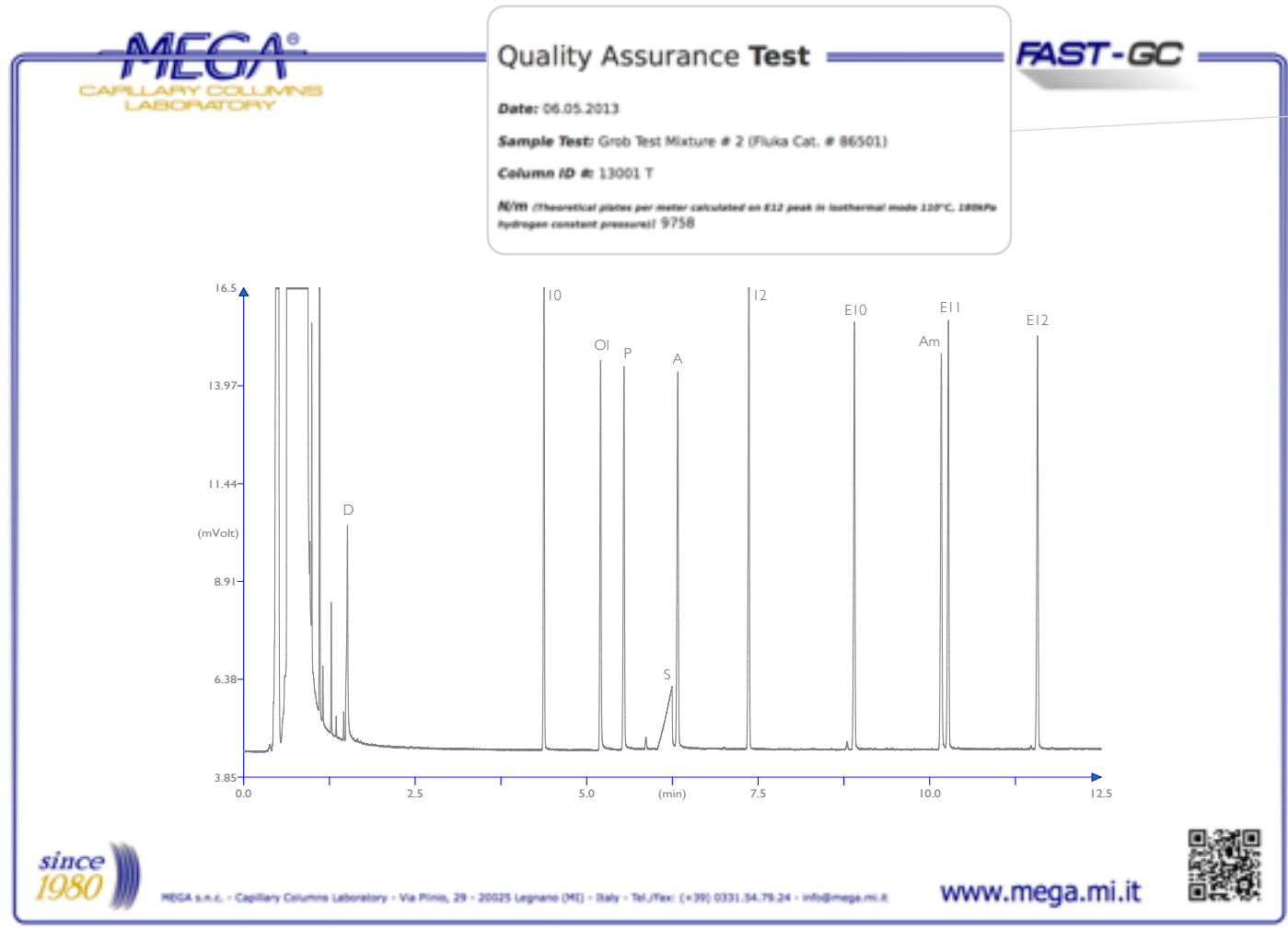
$$N = 5.545 \times (tr / w50)^2$$

we obtain the value of **more than 97000 plates (N)**, **more than 9700 N/m**, which is practically the theoretical 100% efficiency of 100000 plates for a 10m, 0.10mm column (*).

*: see our FAST-GC technical literature to learn more about some fundamental theoretical notions about FAST-GC.

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Catalog Code: F-5-010-020-10

Figure 2. Grob Test chromatogram performed in isothermal mode with the MEGA-5 FAST, 0.10mm, 0.20µm, 10m. The test conditions were: 110°C isothermal, Hydrogen carrier gas @ 180kPa (constant pressure), Split injector (250°C) with split ratio 1:40, 0.5µL injection volume, FID detector (250°C). Grob Test Mix (Fluka cat. # 86501) composition: 2,3-Butanediol (D), Decane (I0), 1-Octanol (OI), 2,6-Dimethylphenol (P), 2-Ethylcaproic acid (S), 2,6-Dimethylaniline (A), Dodecane (I2), methyl Decanoate (E10), Dicyclohexylamine (Am), methyl Undecanoate (E11), methyl Laurate (E12).



Quality Assurance Test

Date: 06.05.2013

Sample Test: Grob Test Mixture # 2 (Fluka Cat. # 86501)

Column ID #: 13001 T

N/m (Theoretical plates per meter calculated on E12 peak in isothermal mode 110°C, 180kPa hydrogen constant pressure): 9758

unsurpassed
QUALITY

We provide each of our FAST-GC column with the specific plates calculation test in isothermal mode included in the Quality Assurance Test, in order to assure the best quality and the extremely high efficiency for our products.



See and download our
FAST-GC solutions
technical literature for free,
with many application
notes included!

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