Biology, chemistry

ADECA: AMINO DENSITY ESTIMATION BY COLORIMETRIC ASSAY

Innovative new method based on Coomassie Brilliant Blue (CBB) colouring

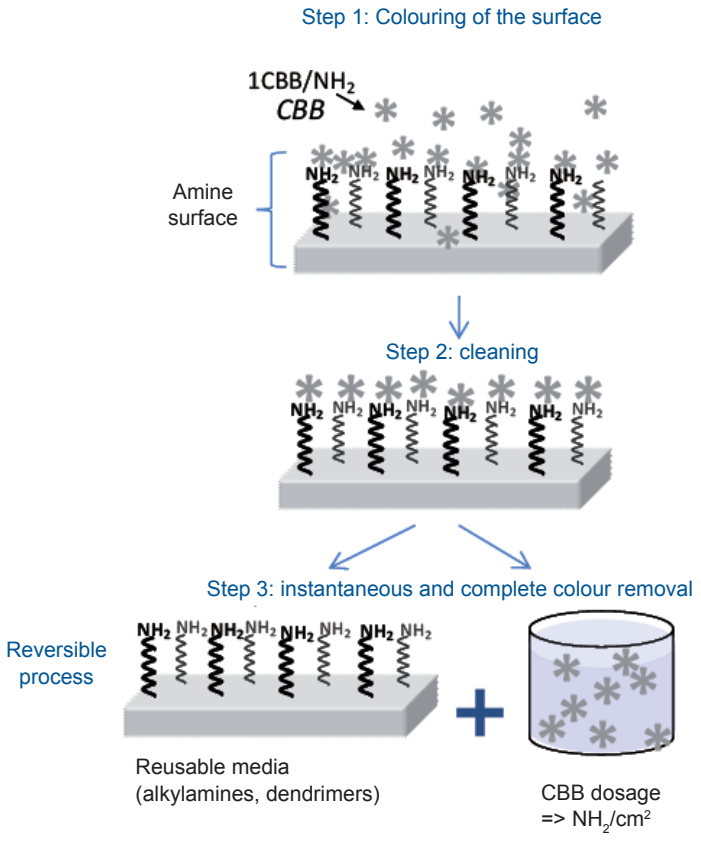
Technological advantages

An innovative, high-performance process

Rapidly determines (<30 min) the surface amino content with no heavy equipment required
Evaluates surface stability (physico-chemical, storage)
Distinguishes between single and multiple-layer grafting
Unequalled sensitivity and dynamic measuring capabilities compared with other characterisation methods: from 10^{13} NH_2/cm^2 (<1 pmol/cm^2) to >10^{16} NH_2/cm^2
Reversible process

Flexible process

Adapted to a wide variety of:
- Materials: plastic polymers, glass, etc.
- Chemistry
- Formats: balls, fibres, tabs, microplates, tubes, solid components, etc.



Characterisation of amine surfaces

Overview of invention

Invention based on a new characterisation method for amine substances.

Innovative colorimetric process based on a specific interaction between NH_2 and colouring, and a colour removal step offering unequalled performance levels.

Potential applications

Space: characterisation of biochip used for in-situ analysis of biomarkers on bodies in the solar system

Non-space applications:

- Use of characterised media for routine applications (cellular growth, ELISA tests, etc.)
- Characterisation of biomaterials and hybrid materials, and monitoring of their production (quality control)
- Characterisation of amine substances (HPLC phase, microsystem, biochips, etc.)
- Routine tools for research laboratories

Commercial benefits

Rapid, reliable, low cost and extremely flexible process

Reversible process

Patented invention, available under license

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For more information

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