

Hyper-branched polyesters (NT007)

The present invention concerns hyper-branched polyesters derived from natural fatty acids based on vegetable oils (colza, sunflower, castor oils...).

Keywords: Hyper-branched polyesters, Hydroxylated fatty esters, Vegetable oil

Intellectual property: WO/2016/059230

> Presentation of the technology

- Rheology modifiers (viscosifier, thickener, fluidizing agents ...)
- Encapsulation or vectorisation of actives
- High functionality level allowing to reach a wide product line
- Modular chemical and physical properties (solubility, hydrophilic-lipophilic balance, rheology...)

> Competitive advantages

- High-performance additives
- Wide range of products
- Industrializable "One pot" synthesis
- Oleochemistry

> Applications

- Paints
- Adhesives
- Lubricants
- Coating
- Cosmetic industry
- Building materials ...

> Development stage

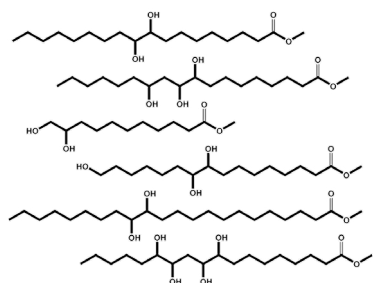
- Technology validation in relevant environment
- Samples available for application trials

1 2 3 4 5 6 7 8 9

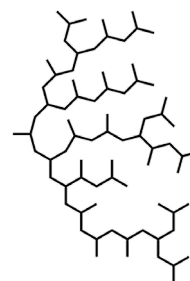
> Development stage

- Scaling-up development
- Extension of product line
- Validation of product performances
- Partnerships for product development

> Technical specifications



Polycondensation



Molar mass :

Mn = 3 000 - 13 000 g.mol⁻¹

Degree of branching :

DB = 0,07 - 0,45

Glass transition :

Tg = -33 - 9 °C

Melting point :

Tf = 20 - 61 °C

Thermal stability :

Td = 254 - 339 °C