

Production of bio-based platform molecules from condensed tannins depolymerization

Description

Building blocks : furylated polyphenols obtained from the depolymerization of condensed tannins that can be functionalised. The one-step synthesis process is being conducted under gentle conditions, with low-impact, bio-based reactants. The process has reached a pre-industrial development stage on Douglas pine tree barks. Other agricultural or wooden resources can be used.



Type of expected transfer

License or license option with R&D program.

Advantages

Biobased compound One-step, low-impact process
Soft conditions Various applications Availability of raw material

Possible applications

Wide range of applications in green chemistry, specialty chemicals and in the area of thermosetting epoxy resins : Emulsifiers and/or antioxydants
Hardeners, epoxy resins, glues, vinyl esters, polycarbonates, polyurethanes, ...

Key words

Polyphenols, condensed tannins, green chemistry, epoxy resin

TRL Scale

1 2 3 4 5 6 7 8 9

Development level

The process is being brought to a pilot scale. Further developments and industrialization will be required depending on the desired application.

Laboratories:

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