



ISTITUTO ITALIANO
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TITLE

Poliéster Obtenido A Partir De Residuos De Tomate Mediante Policondensación No Catalizada En Estado Fundido

INVENTORS

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DESCRIPTION

The present invention is related to a method for obtaining a long-chain polyester from tomato fruit processing residues. The method consists in conditioning the tomato fruit residues, hydrolyzing the conditioned material in basic conditions the cutin fraction and precipitating, by neutralization to pH 3, the hydroxyacids molecules. Thereafter, the obtained hydroxyacids precursors are melted and heated in air at temperature between 150°C and 225°C without any solvent or catalyst, for a period ranged from 2 h to 16h. The final product obtained by this process is a long chain polyester mimicking natural cutin, suitable to be applied as food packaging material.

APPLICATIONS

Plastics, long-chain polyester

KEYWORDS

Tomato, hydroxyacids molecules, solvent, catalyst, hydroxyacids precursors

BIBLIOGRAPHIC DATA

A polyester from tomato fruit processing residues obtained by non-catalyzed melt-polycondensation in air

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