

Title (en)

Method for producing crop crystals for sugar fabrication and compound for same for use in the production of sugar

Title (de)

Verfahren zur Herstellung von Saatkristallen für die Zucker-Fabrikation sowie Zusammensetzung enthaltend Saatkristalle für den Einsatz bei der Zucker-Fabrikation

Title (fr)

Procédé de fabrication de cristaux de semence pour la fabrication de sucre et composition comprenant des cristaux de semence pour l'utilisation dans la fabrication de sucre

Publication

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Application

EP 10162806 A 20100514

Priority

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Abstract (en)

[origin: EP2253363A1] The method for producing a seed product for sugar fabrication, where the seed product contains complete sucrose seed crystals, comprises producing a mixture of sucrose and water, heating the obtained mixture up to a boiling point by dissolving the sucrose in the water and optionally adjusting the dry substance content of the solution by keeping the solution at the boiling point under the evaporation of the water, cooling the heated solution at 50[deg] C or less under the crystallization of the seed crystals, developing supersaturation in the solution based on cooling. The method for producing a seed product for sugar fabrication, where the seed product contains complete sucrose seed crystals, comprises producing a mixture of sucrose and water, heating the obtained mixture up to a boiling point by dissolving the sucrose in the water and optionally adjusting the dry substance content of the solution by keeping the solution at the boiling point under the evaporation of the water, cooling the heated solution at 50[deg] C or less under the crystallization of the seed crystals, developing supersaturation, which triggers the crystallization of the seed crystals, in the solution based on cooling. The seed product is seed crystal suspension, where the sucrose content of the hot solution is 70 wt.% or more if necessary after adjusting the dry substance content. A viscosity-increasing agent is added to the mixture in a quantity of 5 wt.% related to the mixture of water and sucrose. The cooling step takes place within 1 second or less. The content of sucrose in the seed crystal suspension is reduced by chemically converting the dissolved sucrose. The chemical conversion is an enzymatic or acid-catalyzed inversion of the dissolved sucrose to inverted sugar. The pH value of the seed crystal suspension is adjusted by the addition of acid in the acid range for the acid-catalyzed inversion. The seed crystal suspension is kept for the time period of the inversion in the acid range and the inversion is stopped by neutralizing the solution under the addition of a base. The inversion is carried out so long until the content of sucrose is reduced to 15-25 wt.%. An independent claim is included for a seed crystal suspension.

IPC 8 full level

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