

Title (en)

Preparation of seeding crystals for massecuite.

Title (de)

Verfahren zur Erzeugung von Impfkristallen für Zuckersude.

Title (fr)

Préparation de cristaux d'ensemencement pour masse cuite.

Publication

EP 0104277 A1 19840404 (DE)

Application

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Priority

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Abstract (en)

Prodn. comprises mixing a sugar soln. having super-satn. no. 1.12-1.2 and vol. 1.8-2.2% of the end vol. with a suspension of ground sugar of grain-size 5-20 microns. The mixt. is homogenised with a rotary pump. Crystallisation takes place by adjusting the pressure in the crystallisation appts. so that liq. is evaporated and the temp. is lowered. The pressure redn. and/or the temp. is/are adjusted so that the super-satn. no. remains within the 1.12-1.2 limits. The inoculating crystals have uniform grain-size, e.g. of 200 microns. The process can be automated. The amt. of enclosed mother liquor in crystals is reduced, and end prod. has improved crystal quality, e.g. conglomerate amt. is reduced from 81.8%, for a standard process, to 13.7% and ash x 1000 from 11.8- to 7%, whereas average grain-size is increased from 0.58- to 0.64 mm. Energy consumption is lowered.

Abstract (de)

Erzeugung von Impfkristallen für Zuckersüde durch Versetzen einer Zuckerlösung deren Uebersättigungszahl 1,12 bis 1,20 ist und deren Volumen 1,8 bis 2,2% des Endvolumens ist, mit gemahlenem Zucker dessen Korngrösse 5 bis 20 µm ist, Homogenisierung des Gemisches mittels einer Umlaufpumpe und Führung der Kristallisation durch derartige Druckregelung in der Kristallisationsvorrichtung, dass Flüssigkeit verdampft und die Temperatur herabgesetzt wird, wobei die Uebersättigungszahl innerhalb der Grenzen von 1,12 bis 1,20 gehalten wird.

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Citation (search report)

- [A] FR 2073064 A5 19710924 - STAMICARBON
- [A] CH 418260 A 19660731 - BIZET ANDRE PIERRE OSMOND [FR]
- [A] BE 709700 A 19680530
- [A] INTERNATIONAL SUGAR JOURNAL, Band 79, Nr. 937, Januar 1977, Seiten 10-14
- [A] R.A. MCGINNIS: "Beet-sugar technology", 1951, Seiten 404-410, Reinhold Publishing Corporation, New York, USA

Cited by

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