

**ECLA****EUROPEAN CLASSIFICATION****C13B**

**PRODUCTION OF SUCROSE; APPARATUS SPECIALLY ADAPTED THEREFOR (chemically synthesised sugars or sugar derivatives C07H ; fermentation or enzyme-using processes for preparing compounds containing saccharide radicals C12P 19/00) [N1101]**

**Note**

In this subclass, the following terms or expressions are used with the meanings indicated :

- o "sugar" is used in its non-scientific meaning and refers to sucrose, also called "table sugar" or saccharose", a white crystalline disaccharide;
- o "sugar juices" are solutions of sugar, essentially comprising sucrose, which are derived from different plants, e.g. beet, cane or maple;
- o "syrops" are highly concentrated sugar juices.

**C13B5/00**

**Reducing the size of material from which sugar is to be extracted (for extraction of starch C08B 30/02) [N1101]**

## C13B5/02

- . Cutting sugar cane [N1101]

## C13B5/04

- . Shredding sugar cane [N1101]

## C13B5/06

- . Slicing sugar beet [N1101]

## C13B5/08

- . Knives; Adjustment or maintenance thereof [N1101]

**C13B10/00**

**Production of sugar juices (tapping of tree-juices A01G 23/10; tapping-spouts, receptacles for juices A01G 23/14) [N1101]**

## C13B10/00B

- . [N: using chemicals other than extracting agents] [N1101]

## C13B10/00D

- . [N: Conservation of sugar juices] [N1101]

## C13B10/02

- . Expressing juice from sugar cane or similar material, e.g. sorghum saccharatum [N1101]

## C13B10/02B

- . . [N: Treatment of sugar cane before extraction ([C13B5/00](#) takes precedence)] [N1101]

## C13B10/04

- . . combined with imbibition [N1101]

## C13B10/06

- . . Sugar-cane crushers [N1101]

## C13B10/08

- . Extraction of sugar from sugar beet with water [N1101]

## C13B10/08B

- . . [N: Treatment of sugar beet before extraction ([C13B5/00](#) takes precedence)] [N1101]

## C13B10/08D

- . . [N: Processes or apparatus with discontinuous loading] [N1101]

## C13B10/10

- . . Continuous processes [N1101]

- C13B10/10B . . . [N: having rotatable means for agitation or transportation] [N1101]
- C13B10/10B2 . . . . [N: Rotating apparatus] [N1101]
- C13B10/10D . . . [N: with transportation in the form of thin layers, e.g. by endless chains] [N1101]
- C13B10/12 . . Details of extraction apparatus, e.g. arrangements of pipes or valves [N1101]
- C13B10/14 . using extracting agents other than water, e.g. alcohol or salt solutions [N1101]
- C13B15/00** **Expressing water from material from which sugar has been extracted (from starch-extracted material C08B 30/10) [N1101]**
- C13B15/02 . between perforated moving belts [N1101]
- C13B20/00** **Purification of sugar juices [N1101]**
- Note [N1101]**  
When classifying in this group, classification is also made in group [B01D15/08](#) insofar as subject matter of general interest relating to chromatography is concerned
- C13B20/00B . [N: using micro-organisms or enzymes] [N1101]
- C13B20/00K . [N: using chemicals not provided for in groups [C13B20/02](#) to [C13B20/14](#)] [N1101]
- C13B20/00K2 . . [N: Saturation with gases or fumes, e.g. carbon dioxide] [N1101]
- C13B20/02 . using alkaline earth metal compounds [N1101]
- C13B20/04 . . followed by saturation [N1101]
- C13B20/06 . . . with carbon dioxide or sulfur dioxide [N1101]
- C13B20/08 . by oxidation or reduction [N1101]
- C13B20/10 . . using sulfur dioxide or sulfites [N1101]
- C13B20/12 . using adsorption agents, e.g. active carbon [N1101]
- C13B20/12B . . [N: Inorganic agents, e.g. active carbon] [N1101]
- C13B20/12D . . [N: Organic agents, e.g. polyelectrolytes] [N1101]
- C13B20/14 . using ion-exchange materials [N1101]
- C13B20/14B . . [N: Mixed bed ([C13B20/14H](#) takes precedence)] [N1101]
- C13B20/14D . . [N: using only cationic ion-exchange material ([C13B20/14H](#) takes precedence)] [N1101]
- C13B20/14F . . [N: using only anionic ion-exchange material ([C13B20/14H](#) takes precedence)] [N1101]
- C13B20/14H . . [N: for fractionating, adsorption or ion exclusion processes combined with elution or desorption of a sugar fraction] [N1101]
- C13B20/16 . by physical means, e.g. osmosis or filtration [N1101]
- C13B20/16B . . [N: using membranes, e.g. osmosis, ultrafiltration (electrodialysis [C13B20/18](#))] [N1101]
- C13B20/18 . by electrical means [N1101]

<b>C13B25/00</b>	<b>Evaporators or boiling pans specially adapted for sugar juices; Evaporating or boiling sugar juices [N1101]</b>
C13B25/00B	. [N: with heating tubes or plates] [N1101]
C13B25/00C	. [N: with heating plates] [N1101]
C13B25/00D	. [N: with heating coils] [N1101]
C13B25/00F	. [N: rotating apparatus] [N1101]
C13B25/00H	. [N: with direct contact between heating medium and sugar solution] [N1101]
C13B25/02	. Details, e.g. for preventing foaming or for catching juice [N1101]
C13B25/04	. . Heating equipment [N1101]
C13B25/06	. combined with measuring instruments for effecting control of the process [N1101]
<b>C13B30/00</b>	<b>Crystallisation; Crystallising apparatus; Separating crystals from mother liquors; [N: Evaporating or boiling sugar juice] [N1101]</b>
C13B30/00B	. [N: Evaporating or boiling sugar juice] [N1101]
C13B30/00B2	. . [N: using chemicals] [N1101]
C13B30/00B4	. . [N: Multiple effect evaporation] [N1101]
C13B30/02	. Crystallisation; Crystallising apparatus [N1101]
C13B30/02B	. . [N: using chemicals] [N1101]
C13B30/02D	. . [N: Continuous processes, apparatus therefor (C13B30/02H takes precedence)] [N1101]
C13B30/02D2	. . . [N: having rotatable means for agitation or transportation] [N1101]
C13B30/02D4	. . . [N: combined with measuring instruments for effecting control of the process] [N1101]
C13B30/02F	. . [N: Discontinuous processes or apparatus therefor (C13B30/02H takes precedence)] [N1101]
C13B30/02F2	. . . [N: combined with measuring instruments for effecting control of the process] [N1101]
C13B30/02H	. . [N: obtaining sugar crystals by drying sugar syrup or sugar juice, e.g. spray-crystallisation] [N1101]
C13B30/04	. Separating crystals from mother liquor [N1101]
C13B30/06	. . by centrifugal force [N1101]
C13B30/08	. . Washing residual mother liquor from crystals [N1101]
C13B30/10	. . . in centrifuges [N1101]
C13B30/12	. . Recycling mother liquor or wash liquors [N1101]
C13B30/14	. . Dissolving or refining raw sugar [N1101]
<b>C13B35/00</b>	<b>Extraction of sucrose from molasses [N1101]</b>

- C13B35/00B
  - [N: using micro-organisms or enzymes] [N1101]
- C13B35/02
  - by chemical means [N1101]
- C13B35/04
  - . by precipitation as alkaline earth metal saccharates [N1101]
- C13B35/06
  - . using ion exchange [N1101]
- C13B35/08
  - by physical means, e.g. osmosis [N1101]
- C13B40/00** **Drying sugar [N1101]**
- C13B40/00B
  - [N: Drying sugar or syrup in bulk] [N1101]
- C13B40/00B2
  - . [N: combined with agglomeration] [N1101]
- C13B40/00E
  - [N: Drying sugar in compacted form, e.g. cubes] [N1101]
- C13B45/00** **Cutting machines specially adapted for sugar [N1101]**
- C13B45/02
  - in combination with sorting and packing machines [N1101]
- C13B50/00** **Sugar products, e.g. powdered, lump or liquid sugar; Working-up of sugar (C13B 40/00, C13B 45/00 take precedence; confectionery A23G 3/00) [N1101]**
- C13B50/00B
  - [N: Addition of chemicals or other foodstuffs] [N1101]
- C13B50/00D
  - [N: Agglomerated sugar products; Agglomeration] [N1101]
- C13B50/00M
  - [N: Molasses; Treatment of molasses (extraction of sucrose [C13B35/00](#))] [N1101]
- C13B50/00M2
  - . [N: Drying] [N1101]
- C13B50/02
  - formed by moulding sugar [N1101]
- C13B99/00** **Subject matter not provided for in other groups of this subclass [N1101]**