

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 "syrups" 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]

- C13B25/00** **Evaporators or boiling pans specially adapted for sugar juices; Evaporating or boiling sugar juices [N1101]**
- 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]
- C13B30/00** **Crystallisation; Crystallising apparatus; Separating crystals from mother liquors; [N: Evaporating or boiling sugar juice] [N1101]**
- 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]
- C13B35/00** **Extraction of sucrose from molasses [N1101]**

- 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]****