

SECTION C — CHEMISTRY; METALLURGY

C13 SUGAR INDUSTRY

Note(s) [2011.01]

In class C13, the following terms or expressions are used with the meanings indicated:

- "sugars" are a class of edible, water-soluble crystalline carbohydrates, having a characteristic sweet taste, including mono-, di- and oligosaccharides, e.g. sucrose, lactose and fructose. A more specific meaning of the term "sugar" is defined in the note of subclass C13B.

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) [2011.01]

Note(s) [2011.01]

In subclass C13B, the following terms or expressions are used with the meanings indicated:

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

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| 5/00 | Reducing the size of material from which sugar is to be extracted (for extraction of starch C08B 30/02) [2011.01] | 20/04 | • • followed by saturation [2011.01] |
| | | 20/06 | • • • with carbon dioxide or sulfur dioxide [2011.01] |
| 5/02 | • Cutting sugar cane [2011.01] | 20/08 | • by oxidation or reduction [2011.01] |
| 5/04 | • • Shredding sugar cane [2011.01] | 20/10 | • • using sulfur dioxide or sulfites [2011.01] |
| 5/06 | • Slicing sugar beet [2011.01] | 20/12 | • using adsorption agents, e.g. active carbon [2011.01] |
| 5/08 | • Knives; Adjustment or maintenance thereof [2011.01] | 20/14 | • using ion-exchange materials [2011.01] |
| | | 20/16 | • by physical means, e.g. osmosis or filtration [2011.01] |
| 10/00 | Production of sugar juices (tapping of tree-juices A01G 23/10; tapping-spouts, receptacles for juices A01G 23/14) [2011.01] | 20/18 | • by electrical means [2011.01] |
| 10/02 | • Expressing juice from sugar cane or similar material, e.g. sorghum saccharatum [2011.01] | 25/00 | Evaporators or boiling pans specially adapted for sugar juices; Evaporating or boiling sugar juices [2011.01] |
| 10/04 | • • combined with imbibition [2011.01] | 25/02 | • Details, e.g. for preventing foaming or for catching juice [2011.01] |
| 10/06 | • • Sugar-cane crushers [2011.01] | 25/04 | • • Heating equipment [2011.01] |
| 10/08 | • Extraction of sugar from sugar beet with water [2011.01] | 25/06 | • combined with measuring instruments for effecting control of the process [2011.01] |
| 10/10 | • • Continuous processes [2011.01] | 30/00 | Crystallisation; Crystallising apparatus; Separating crystals from mother liquors [2011.01] |
| 10/12 | • • Details of extraction apparatus, e.g. arrangements of pipes or valves [2011.01] | 30/02 | • Crystallisation; Crystallising apparatus [2011.01] |
| 10/14 | • using extracting agents other than water, e.g. alcohol or salt solutions [2011.01] | 30/04 | • Separating crystals from mother liquor [2011.01] |
| 15/00 | Expressing water from material from which sugar has been extracted (from starch-extracted material C08B 30/10) [2011.01] | 30/06 | • • by centrifugal force [2011.01] |
| 15/02 | • between perforated moving belts [2011.01] | 30/08 | • • Washing residual mother liquor from crystals [2011.01] |
| 20/00 | Purification of sugar juices [2011.01] | 30/10 | • • • in centrifuges [2011.01] |
| | Note(s) [2011.01] | 30/12 | • • Recycling mother liquor or wash liquors [2011.01] |
| | When classifying in this group, classification is also made in group B01D 15/08 insofar as subject matter of general interest relating to chromatography is concerned. | 30/14 | • • Dissolving or refining raw sugar [2011.01] |
| 20/02 | • using alkaline earth metal compounds [2011.01] | 35/00 | Extraction of sucrose from molasses [2011.01] |
| | | 35/02 | • by chemical means [2011.01] |
| | | 35/04 | • • by precipitation as alkaline earth metal saccharates [2011.01] |
| | | 35/06 | • • using ion exchange [2011.01] |

C13B

35/08 • by physical means, e.g. osmosis [2011.01]

40/00 **Drying sugar [2011.01]**

45/00 **Cutting machines specially adapted for sugar [2011.01]**

45/02 • in combination with sorting and packing machines [2011.01]

50/00 **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) [2011.01]

50/02 • formed by moulding sugar [2011.01]

99/00 **Subject matter not provided for in other groups of this subclass [2011.01]**

C13K SACCHARIDES OBTAINED FROM NATURAL SOURCES OR BY HYDROLYSIS OF NATURALLY OCCURRING DISACCHARIDES, OLIGOSACCHARIDES OR POLYSACCHARIDES (production of sucrose C13B; chemically synthesised sugars or sugar derivatives C07H; polysaccharides, e.g. starch, derivatives thereof C08B; malt C12C; fermentation or enzyme-using processes for preparing compounds containing saccharide radicals C12P 19/00)

1/00 **Glucose** (separation from invert sugar C13K 3/00); **Glucose-containing syrups [1, 2, 2006.01]**

1/02 • obtained by saccharification of cellulosic materials (manufacture of fodder A23K 10/32) [1, 2006.01]

1/04 • • Purifying [1, 2006.01]

1/06 • obtained by saccharification of starch or raw materials containing starch [1, 2006.01]

1/08 • • Purifying [1, 2006.01]

1/10 • Crystallisation [1, 2006.01]

3/00 **Invert sugar; Separation of glucose or fructose from invert sugar [1, 2006.01]**

5/00 **Lactose [1, 2006.01]**

7/00 **Maltose [1, 2006.01]**

11/00 **Fructose** (separation from invert sugar C13K 3/00) [2, 2006.01]

13/00 **Sugars not otherwise provided for in this class [2, 2006.01]**