

SECTION A — HUMAN NECESSITIES

A23 FOODS, FOODSTUFFS OR NON-ALCOHOLIC BEVERAGES; PREPARATION, TREATMENT OR PRESERVATION THEREOF

A23B PRESERVATION OF FOODS, FOODSTUFFS OR NON-ALCOHOLIC BEVERAGES; CHEMICAL RIPENING OF FRUIT OR VEGETABLES

Subclass index

PRESERVATION OF FOODS, FOODSTUFFS OR NON-ALCOHOLIC BEVERAGES

in general.....	2/00
of specific products.....	
meat, sausages, fish or fish products.....	4/00
eggs or egg products.....	5/00
fruit or vegetables.....	7/00
edible seeds, e.g. cereals.....	9/00
milk or dairy products.....	11/00
edible oils or fats.....	20/00
flour or dough before baking.....	40/00
finished bakery products.....	45/00
non-alcoholic beverages.....	70/00
Pulses.....	75/00
cocoa or cocoa products.....	80/00
tea, tea substitutes or herbal tea.....	85/00
coffee or coffee substitutes.....	90/00
CHEMICAL RIPENING OF FRUIT OR VEGETABLES.....	7/00
SUBJECT MATTER NOT PROVIDED FOR IN OTHER GROUPS OF THIS SUBCLASS.....	99/00

- 2/00 Preservation of foods or foodstuffs, in general [2025.01]**
- Note(s) [2025.01]**
- This group covers processes or apparatus for the preservation of foods or foodstuffs, in general, i.e. where the nature of the product is not relevant or not specified.*
- 2/05 • by heating using irradiation or electric treatment (drying or kilning A23B 2/90) [2025.01]
- 2/08 • • using microwaves or dielectric heating [2025.01]
- 2/10 • by treatment with pressure variation, shock, acceleration or shear stress [2025.01]
- 2/20 • by heating materials in packages which are progressively transported, continuously or stepwise, through the apparatus [2025.01]
- 2/22 • • with packages on endless chain or band conveyors [2025.01]
- 2/25 • • with packages transported along a helical path [2025.01]
- 2/28 • • with packages on a revolving platform [2025.01]
- 2/30 • by heating materials in packages which are not progressively transported through the apparatus [2025.01]
- 2/33 • • with packages in intercommunicating chambers through which the heating medium is circulated [2025.01]

- 2/37 • • with packages moving on the spot [2025.01]
- 2/40 • by heating loose unpacked materials [2025.01]
- 2/42 • • while they are progressively transported through the apparatus [2025.01]
- 2/44 • • • with transport along plates [2025.01]
- 2/46 • • • with transport through tubes [2025.01]
- 2/48 • • with the materials in spray form [2025.01]
- 2/50 • by irradiation without heating [2025.01]
- 2/53 • • with ultraviolet light [2025.01]
- 2/57 • • by treatment with ultrasonic waves [2025.01]
- 2/60 • by treatment with electric currents without heating effect [2025.01]
- 2/70 • by treatment with chemicals [2025.01]
- 2/704 • • in the form of gases, e.g. fumigation; Compositions or apparatus therefor [2025.01]
- 2/708 • • • in a controlled atmosphere, e.g. partial vacuum, comprising only CO₂, N₂, O₂ or H₂O [2025.01]
- 2/712 • • • • in which an absorbent is placed or used (packages for foodstuffs with provision for absorbing fluids B65D 81/26) [2025.01]
- 2/717 • • • • • Oxygen absorbent [2025.01]
- 2/721 • • • • in a controlled atmosphere comprising other gases in addition to CO₂, N₂, O₂ or H₂O [2025.01]
- 2/725 • • in the form of liquids or solids [2025.01]

- 2/729 • • • Organic compounds; Microorganisms; Enzymes [2025.01]

Note(s) [2025.01]

In groups A23B 2/733-A23B 2/779, the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place

- 2/733 • • • Compounds of undetermined constitution obtained from animals or plants [2025.01]
- 2/742 • • • Organic compounds containing oxygen [2025.01]
- 2/746 • • • • with singly-bound oxygen [2025.01]
- 2/75 • • • • with doubly-bound oxygen [2025.01]
- 2/754 • • • • containing carboxyl groups [2025.01]
- 2/758 • • • • Carboxylic acid esters [2025.01]
- 2/762 • • • Organic compounds containing nitrogen [2025.01]
- 2/767 • • • Organic compounds containing sulfur [2025.01]
- 2/771 • • • Organic compounds containing hetero rings [2025.01]
- 2/775 • • • Organic compounds containing phosphorus [2025.01]
- 2/779 • • • Sugars; Derivatives thereof [2025.01]
- 2/783 • • • Microorganisms; Enzymes [2025.01]
- 2/788 • • Inorganic compounds [2025.01]
- 2/792 • • Apparatus for preserving using liquids [2025.01]
- 2/796 • • Apparatus for preserving using solids [2025.01]
- 2/80 • Freezing; Subsequent thawing; Cooling [2025.01]
- 2/82 • Thawing subsequent to freezing [2025.01]
- 2/85 • with addition of chemicals [2025.01]
- 2/88 • • with direct contact between the food and the chemical, e.g. liquid N₂ at cryogenic temperature [2025.01]
- 2/90 • by drying or kilning; Subsequent reconstitution [2025.01]
- 2/91 • • with addition of chemicals before or during drying [2025.01]
- 2/92 • Freeze drying [2025.01]
- 2/93 • Spray drying [2025.01]
- 2/94 • Thin-layer drying, drum drying or roller drying [2025.01]
- 2/95 • Fluidised-bed drying [2025.01]
- 2/96 • Foam drying [2025.01]
- 2/97 • using irradiation or electric treatment, e.g. ultrasonic waves [2025.01]

Preservation of specific foods, foodstuffs or non-alcoholic beverages; Chemical ripening of fruit or vegetables [2025.01]

- 4/00 Preservation of meat, sausages, fish or fish products [2, 2006.01]**
- 4/005 • Preserving by heating [5, 2006.01]
- 4/01 • • by irradiation or electric treatment [5, 2006.01]
- 4/015 • Preserving by irradiation or electric treatment without heating effect [5, 2006.01]
- 4/02 • Preserving by means of inorganic salts (apparatus therefor A23B 4/26, A23B 4/32) [2, 2006.01]
- 4/023 • • by kitchen salt or mixtures thereof with inorganic or organic compounds [5, 2006.01]
- 4/027 • • by inorganic salts other than kitchen salt or mixtures thereof with organic compounds, e.g. biochemical compounds [5, 2006.01]

- 4/03 • Drying; Subsequent reconstitution [5, 2006.01]
- 4/033 • • with addition of chemicals (A23B 4/037 takes precedence) [5, 2006.01]
- 4/037 • • Freeze-drying [5, 2006.01]
- 4/044 • Smoking; Smoking devices [5, 2006.01]
- 4/048 • • with addition of chemicals other than natural smoke [5, 2006.01]
- 4/052 • • Smoke generators [5, 2006.01]
- 4/056 • • Smoking combined with irradiation or electric treatment, e.g. electrostatic smoking [5, 2006.01]
- 4/06 • Freezing; Subsequent thawing; Cooling [2, 2006.01]
- 4/07 • • Thawing subsequent to freezing [5, 2006.01]
- 4/08 • • with addition of chemicals before or during cooling [2, 2006.01]
- 4/09 • • with direct contact between the food and the chemical, e.g. liquid N₂, at cryogenic temperature [5, 2006.01]
- 4/10 • Coating with a protective layer; Compositions or apparatus therefor [2, 2006.01]
- 4/12 • Preserving with acids; Acid fermentation [2, 2006.01]
- 4/14 • Preserving with chemicals not covered by groups A23B 4/02 or A23B 4/12 [2, 2006.01]
- 4/16 • • in the form of gases, e.g. fumigation; Compositions or apparatus therefor [5, 2006.01]
- 4/18 • • in the form of liquids or solids (apparatus therefor A23B 4/26, A23B 4/32) [5, 2006.01]
- 4/20 • • Organic compounds; Microorganisms; Enzymes [5, 2006.01]
- 4/22 • • • Microorganisms; Enzymes [5, 2006.01]
- 4/24 • • • Inorganic compounds [5, 2006.01]
- 4/26 • Apparatus for preserving using liquids [5, 2006.01]
- 4/28 • • by injection of liquids [5, 2006.01]
- 4/30 • • by spraying of liquids [5, 2006.01]
- 4/32 • Apparatus for preserving using solids [5, 2006.01]
- 5/00 Preservation of eggs or egg products [1, 2006.01]**
- 5/005 • Preserving by heating [5, 2006.01]
- 5/01 • • by irradiation or electric treatment [5, 2006.01]
- 5/015 • Preserving by irradiation or electric treatment without heating effect [5, 2006.01]
- 5/02 • Drying; Subsequent reconstitution [1, 5, 2006.01]
- 5/025 • • with addition of chemicals (A23B 5/03, A23B 5/035 take precedence) [5, 2006.01]
- 5/03 • • Freeze-drying [5, 2006.01]
- 5/035 • • Spray-drying [5, 2006.01]
- 5/04 • Freezing; Subsequent thawing; Cooling [1, 2006.01]
- 5/045 • • Thawing subsequent to freezing [5, 2006.01]
- 5/05 • • with addition of chemicals [5, 2006.01]
- 5/055 • • • with direct contact between the food and the chemical, e.g. liquid N₂, at cryogenic temperature [5, 2006.01]
- 5/06 • Coating eggs with a protective layer; Compositions or apparatus therefor [1, 5, 2006.01]
- 5/08 • Preserving with chemicals [5, 2006.01]
- 5/10 • • in the form of gases, e.g. fumigation; Compositions or apparatus therefor [5, 2006.01]
- 5/12 • • in the form of liquids or solids [5, 2006.01]
- 5/14 • • • Organic compounds; Microorganisms; Enzymes [5, 2006.01]
- 5/16 • • • • Microorganisms; Enzymes [5, 2006.01]
- 5/18 • • • Inorganic compounds [5, 2006.01]
- 5/20 • • • Apparatus for preserving using liquids [5, 2006.01]
- 5/22 • • • Apparatus for preserving using solids [5, 2006.01]

7/00 Preservation of fruit or vegetables; Chemical ripening of fruit or vegetables [1, 3, 2006.01]

- 7/005 • Preserving by heating [5, 2006.01]
- 7/01 • • by irradiation or electric treatment [5, 2006.01]
- 7/015 • Preserving by irradiation or electric treatment without heating effect [5, 2006.01]
- 7/02 • Dehydrating; Subsequent reconstitution (dried cooked potatoes A23L 19/12) [1, 2006.01]
- 7/022 • • with addition of chemicals (A23B 7/024-A23B 7/028 take precedence) [5, 2006.01]
- 7/024 • • Freeze-drying [5, 2006.01]
- 7/026 • • Spray-drying [5, 2006.01]
- 7/028 • • Thin layer-, drum- or roller-drying [5, 2006.01]
- 7/03 • • Drying raw potatoes [1, 2006.01]
- 7/04 • Freezing; Subsequent thawing; Cooling [1, 2006.01]
- 7/045 • • Thawing subsequent to freezing [5, 2006.01]
- 7/05 • • with addition of chemicals [5, 2006.01]
- 7/055 • • • with direct contact between the food and the chemical, e.g. liquid N₂, at cryogenic temperature [5, 2006.01]
- 7/06 • Blanching (machines therefor A23N 12/00) [1, 3, 2006.01]
- 7/08 • Preserving with sugars (marmalade, jam or fruit jellies A23L 21/10) [1, 2006.01]
- 7/10 • Preserving with acids; Acid fermentation [1, 2006.01]
- 7/12 • • Apparatus for compressing sauerkraut [1, 2006.01]
- 7/14 • Preserving or ripening with chemicals not covered by group A23B 7/08 or A23B 7/10 [1, 2006.01]
- 7/144 • • in the form of gases, e.g. fumigation; Compositions or apparatus therefor [3, 5, 2006.01]
- 7/148 • • • in a controlled atmosphere, e.g. partial vacuum, comprising only CO₂, N₂, O₂ or H₂O [3, 2006.01]
- 7/152 • • • in a controlled atmosphere comprising other gases in addition to CO₂, N₂, O₂ or H₂O [3, 2006.01]
- 7/153 • • in the form of liquids or solids [5, 2006.01]
- 7/154 • • • Organic compounds; Microorganisms; Enzymes [5, 2006.01]
- 7/155 • • • • Microorganisms; Enzymes [5, 2006.01]
- 7/157 • • • Inorganic compounds [5, 2006.01]
- 7/158 • • • Apparatus for preserving using liquids [5, 2006.01]
- 7/159 • • • Apparatus for preserving using solids [5, 2006.01]
- 7/16 • Coating with a protective layer; Compositions or apparatus therefor (A23B 7/08 takes precedence) [1, 5, 2006.01]

9/00 Preservation of edible seeds, e.g. cereals (preservation of pulses A23B 75/00) [1, 2006.01, 2025.01]

- 9/02 • Preserving by heating [5, 2006.01]
- 9/04 • • by irradiation or electric treatment [5, 2006.01]
- 9/06 • Preserving by irradiation or electric treatment without heating effect [5, 2006.01]
- 9/08 • Drying; Subsequent reconstitution [5, 2006.01]
- 9/10 • Freezing; Subsequent thawing; Cooling [5, 2006.01]
- 9/12 • • Thawing subsequent to freezing [5, 2006.01]
- 9/14 • Coating with a protective layer; Compositions or apparatus therefor [5, 2006.01]
- 9/16 • Preserving with chemicals [5, 2006.01]
- 9/18 • • in the form of gases, e.g. fumigation; Compositions or apparatus therefor [5, 2006.01]
- 9/20 • • • in a controlled atmosphere, e.g. partial vacuum, comprising only CO₂, N₂, O₂ or H₂O [5, 2006.01]

- 9/22 • • • in a controlled atmosphere comprising other gases in addition to CO₂, N₂, O₂ or H₂O [5, 2006.01]
- 9/24 • • in the form of liquids or solids [5, 2006.01]
- 9/26 • • • Organic compounds; Microorganisms; Enzymes [5, 2006.01]
- 9/28 • • • • Microorganisms; Enzymes [5, 2006.01]
- 9/30 • • • Inorganic compounds [5, 2006.01]
- 9/32 • • • Apparatus for preserving using liquids [5, 2006.01]
- 9/34 • • • Apparatus for preserving using solids [5, 2006.01]

11/00 Preservation of milk or dairy products [2025.01]

- 11/10 • Preservation of milk or milk preparations [2025.01]
- 11/12 • • by heating (by irradiation, e.g. by microwaves A23B 11/16) [2025.01]
- 11/123 • • • in packages [2025.01]
- 11/127 • • • • progressively transported through the apparatus [2025.01]
- 11/13 • • • the materials being loose unpacked [2025.01]
- 11/133 • • • • and progressively transported through the apparatus [2025.01]
- 11/137 • • • • • in direct contact with the heating medium, e.g. steam [2025.01]
- 11/14 • • by freezing or cooling [2025.01]
- 11/145 • • • in packages [2025.01]
- 11/16 • • by irradiation, e.g. by microwaves [2025.01]
- 11/18 • • by addition of preservatives (addition of microorganisms or enzymes A23C 9/12; addition of other substances A23C 9/152) [2025.01]
- 11/20 • Preservation of milk substitutes [2025.01]
- 11/22 • • containing non-milk components as source of fats or proteins (preservation of whey or whey preparations containing non-milk components as source of fats or proteins A23B 11/84) [2025.01]
- 11/23 • • • containing non-milk fats but no non-milk proteins (A23B 11/27, A23B 11/29 take precedence) [2025.01]
- 11/25 • • • containing non-milk proteins (A23B 11/27, A23B 11/29 take precedence) [2025.01]
- 11/27 • • • containing caseinates but no other milk proteins or milk fats [2025.01]
- 11/29 • • • containing or not lactose but no other milk components as source of fats, carbohydrates or proteins [2025.01]
- 11/30 • Preservation of cream or cream preparations [2025.01]
- 11/35 • • by addition of preservatives (containing or treated with microorganisms, enzymes or antibiotics A23C 13/16) [2025.01]
- 11/40 • Preservation of butter or butter preparations [2025.01]
- 11/45 • • by addition of preservatives [2025.01]
- 11/50 • Preservation of buttermilk or buttermilk preparations [2025.01]
- 11/55 • • containing, or treated with, microorganisms or enzymes [2025.01]
- 11/60 • Preservation of cheese or cheese preparations [2025.01]
- 11/65 • • by addition of preservatives [2025.01]
- 11/67 • • • of antibiotics [2025.01]
- 11/70 • Preservation of cheese substitutes [2025.01]
- 11/75 • • containing neither milk components, nor caseinate, nor lactose, as sources of fats, proteins or carbohydrates [2025.01]

A23B

- 11/80 • Preservation of whey or whey preparations (preservation of milk or milk preparations A23B 11/10) [2025.01]
- 11/82 • • containing, or treated with, microorganisms or enzymes [2025.01]
- 11/84 • • containing non-milk components as source of fats or proteins [2025.01]
- 11/86 • • Mixtures of whey with milk products or milk components [2025.01]
- 11/87 • • containing other organic additives, e.g. vegetable or animal products [2025.01]
- 11/88 • • containing inorganic additives [2025.01]
- 20/00 Preservation of edible oils or fats [2025.01]**
- 20/10 • Preservation of edible oil or fat compositions containing an aqueous phase, e.g. margarines [2025.01]
- 20/30 • Preservation of other edible oils or fats, e.g. shortenings or cooking oils [2025.01]
- 40/00 Preservation of flour or dough before baking [2025.01]**
- 40/10 • by cooling [2025.01]
- 40/30 • by heating [2025.01]
- 40/50 • by irradiation [2025.01]
- 40/60 • by storage in an inert atmosphere [2025.01]
- 45/00 Preservation of finished bakery products [2025.01]**
- 45/10 • by cooling [2025.01]
- 45/30 • by heating [2025.01]
- 45/50 • by irradiation [2025.01]
- 45/70 • by coating [2025.01]

- 70/00 Preservation of non-alcoholic beverages** (preservation of beverages from legumes A23B 75/10; preservation of beverages containing tea, tea substitutes or herbal tea A23B 85/10; preservation of beverages containing coffee or coffee substitutes A23B 90/10) [2025.01]
 - 70/10 • by addition of preservatives [2025.01]
 - 70/20 • by cooling [2025.01]
 - 70/30 • by heating [2025.01]
 - 70/35 • • by irradiation or electric treatment [2025.01]
 - 70/50 • by irradiation or electric treatment, without heating [2025.01]
 - 75/00 Preservation of pulses; Preservation of products from legumes [2025.01]**
 - 75/10 • Preservation of beverages from legumes, e.g. soy drinks [2025.01]
 - 80/00 Preservation of cocoa or cocoa products [2025.01]**
 - 85/00 Preservation of tea, tea substitutes or herbal tea [2025.01]**
 - 85/10 • Preservation of beverages containing tea, tea substitutes or herbal tea [2025.01]
 - 90/00 Preservation of coffee or coffee substitutes [2025.01]**
 - 90/10 • Preservation of beverages containing coffee or coffee substitutes [2025.01]
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- 99/00 Subject matter not provided for in other groups of this subclass [2025.01]**