

ECLA EUROPEAN CLASSIFICATION

- A23B PRESERVING, e.g. BY CANNING, MEAT, FISH, EGGS, FRUIT, VEGETABLES, EDIBLE SEEDS; CHEMICAL RIPENING OF FRUIT OR VEGETABLES; THE PRESERVED, RIPENED, OR CANNED PRODUCTS** (preserving foodstuffs in general [A23L3/00](#); preserving in general [A61L](#); applying food preservatives in packages [B65D81/28](#))
- A23B4/00 General methods for preserving meat, sausages, fish or fish products**
- A23B4/00H . [N: Preservation in association with shaping ([A23B4/005E](#), [A23B4/01](#), [A23B4/06D](#) and [A23B4/06F](#) take precedence)]
- A23B4/005 . Preserving by heating
- A23B4/005F . . [N: with gas or liquids, with or without shaping, e.g. in form of powder, granules or flakes]
- [N: **Note**
The heating means for the gas or liquid are not classified
]
- A23B4/005F4 . . . [N: with packages, or with shaping in the form of blocks or portions]
- A23B4/01 . . by irradiation or electric treatment [N: with or without shaping, e.g. in form of powder, granules or flakes]
- A23B4/01P . . . [N: with packages, or with shaping in the form of blocks or portions]
- A23B4/015 . Preserving by irradiation or electric treatment without heating effect
- A23B4/02 . Preserving by means of inorganic salts (apparatus therefor [A23B4/26](#), [A23B4/32](#))
- A23B4/02F . . [N: with apparatus adapted for gaseous preserving agents]
- A23B4/023 . . by kitchen salt or mixtures thereof with inorganic or organic compounds
- A23B4/023C . . . [N: with organic compounds or biochemical products]
- A23B4/027 . . by inorganic salts other than kitchen salt, or mixtures thereof with organic compounds, e.g. biochemical compounds
- A23B4/03 . Drying; Subsequent reconstitution [N: (drying apparatus in general [F26B](#))]
- A23B4/03M . . [N: Apparatus for drying ([A23B4/037](#) takes precedence)]
- A23B4/033 . . with addition of chemicals ([A23B4/037](#) takes precedence)
- A23B4/037 . . Freeze-drying, [N: i.e. cryodesiccation, lyophilisation; Apparatus therefor]
- A23B4/044 . Smoking; Smoking devices
- A23B4/048 . . with addition of chemicals other than natural smoke
- A23B4/052 . . Smoke generators; [N: Smoking apparatus ([A23B4/056](#) takes precedence)]
- A23B4/052B . . . [N: Smoke generators using wood-pyrolysis or wood-friction]
- A23B4/052L . . . [N: Smoke generators or smoking apparatus using liquid smoke in gaseous or liquid form]
- A23B4/056 . . Smoking combined with irradiation or electric treatment, e.g. electrostatic smoking; [N: Apparatus therefor]

- A23B4/06 . Freezing; Subsequent thawing; Cooling
- A23B4/06D . . [N: the materials being transported through or in the apparatus with or without shaping, e.g. in the form of powder, granules or flakes (moving on the spot only [A23B4/06F](#))]
- A23B4/06D2 . . . [N: with packages or with shaping in the form of blocks or portions]
- A23B4/06F . . [N: the materials not being transported through or in the apparatus with or without shaping, e.g. in the form of powder, granules or flakes]
- A23B4/06F2 . . . [N: with packages or with shaping in the form of blocks or portions]
- A23B4/07 . . Thawing subsequent to freezing
- A23B4/08 . . with addition of chemicals [N: or treatment with chemicals] before or during cooling, [N: e.g. in the form of an ice coating or frozen block]
- A23B4/09 . . . with direct contact between the food and the chemical, e.g. liquid N₂, at cryogenic temperature

- A23B4/10 . Coating with a protective layer; Compositions or apparatus therefor [N: ([A23B4/08](#) takes precedence)]

- A23B4/12 . Preserving with acids; Acid fermentation

- A23B4/14 . Preserving with chemicals not covered by groups [A23B4/02](#) or [A23B4/12](#)
- A23B4/16 . . in the form of gases, e.g. fumigation; Compositions or apparatus therefor
- A23B4/18 . . in the form of liquids or solids (apparatus therefor [A23B4/26](#), [A23B4/32](#))
- A23B4/20 . . . Organic compounds; Micro-organisms; Enzymes (acid fermentation [A23B4/12](#))
- A23B4/22 Micro-organisms; Enzymes; [N: Antibiotics]
- A23B4/24 . . . Inorganic compounds

- A23B4/26 . Apparatus for preserving using liquids; [N: Methods therefor]
- A23B4/28 . . by injection of liquids
- A23B4/28J . . . [N: with inorganic salts]
- A23B4/30 . . by spraying of liquids
- A23B4/30P . . . [N: with inorganic salts]

- A23B4/32 . Apparatus for preserving using solids
- A23B4/32S . . [N: with inorganic salts]

- A23B5/00** **Preservation of eggs or egg products (preserving dough or bakery products [A21D](#))**

- A23B5/005 . Preserving by heating
- A23B5/005C . . [N: in the shell]
- A23B5/005L . . [N: without the shell]
- A23B5/005L6 . . . [N: with packages]
- A23B5/01 . . by irradiation or electric treatment

- A23B5/015 . Preserving by irradiation or electric treatment without heating effect

- A23B5/02 . Drying; Subsequent reconstitution

- A23B5/02F . . [N: Drying with use of gas or vacuum]
- A23B5/025 . . [N: Drying] with addition of chemicals ([A23B5/03](#), [A23B5/035](#) take precedence)
- A23B5/025L . . . [N: Drying with use of liquids, e.g. by extraction]
- A23B5/03 . . Freeze-drying, [N: i.e. cryodesiccation, lyophilisation; Apparatus therefor]
- A23B5/035 . . Spray-drying

- A23B5/04 . Freezing; Subsequent thawing; Cooling
- A23B5/04L . . [N: Freezing or cooling without shell ([A23B5/05](#) takes precedence)]
- A23B5/04L6 . . . [N: with packages]
- A23B5/045 . . Thawing subsequent to freezing
- A23B5/05 . . [N: Freezing or cooling] with addition of chemicals
- A23B5/055 . . . with direct contact between the food and the chemical, e.g. liquid nitrogen, at cryogenic temperature

- A23B5/06 . Coating eggs with a protective layer; Compositions or apparatus therefor
- A23B5/06D . . [N: Apparatus for coating]

- A23B5/08 . Preserving with chemicals
- A23B5/10 . . in the form of gases, e.g. fumigation; Compositions or apparatus therefor
- A23B5/12 . . in the form of liquids or solids
- A23B5/14 . . . Organic compounds; Micro-organisms; Enzymes
- A23B5/16 Micro-organisms; Enzymes
- A23B5/18 . . . Inorganic compounds
- A23B5/20 . . . Apparatus for preserving using liquids
- A23B5/22 . . . Apparatus for preserving using solids

- A23B7/00 Preservation or chemical ripening of fruit or vegetables**

- A23B7/005 . Preserving by heating
- A23B7/005F . . [N: by direct or indirect contact with heating gases or liquids]
- A23B7/005F4 . . . [N: with packages]
- A23B7/01 . . by irradiation or electric treatment
- A23B7/01P . . . [N: with packages]

- A23B7/015 . Preserving by irradiation or electric treatment without heating effect

- A23B7/02 . Dehydrating; Subsequent reconstitution ([dried cooked potatoes A23L1/216](#))
- A23B7/02D . . [N: by contact of the material with fluids, e.g. drying gas or extracting liquids]
- A23B7/02F . . [N: Foam drying] [N9811]
- A23B7/02P . . [N: Post-treatment of dried fruits or vegetables] [N9811]
- A23B7/022 . . with addition of chemicals [N: before or during drying, e.g. semi-moist products] ([A23B7/024](#) to [A23B7/028](#) take precedence)
- A23B7/024 . . Freeze-drying, [N: i.e. cryodesiccation or lyophilisation]
- A23B7/026 . . Spray-drying
- A23B7/028 . . Thin layer-, drum- or roller-drying [N: or by contact with a hot surface]

- A23B7/03 . . . Drying raw potatoes
- A23B7/04 . Freezing; Subsequent thawing; Cooling
- A23B7/04D . . . [N: the material being transported through or in the apparatus with or without shaping, e.g. in the form of powder, granules or flakes ([A23B7/05](#) takes precedence; moving on the spot only [A23B7/04E](#))]
- A23B7/04D2 [N: with packages or with shaping in the form of blocks or portions]
- A23B7/04F . . . [N: the material not being transported through or in the apparatus, with or without shaping, e.g. in the form of powder, granules or flakes ([A23B7/05](#) takes precedence)]
- A23B7/04F2 [N: with packages or with shaping in the form of blocks or portions]
- A23B7/04K . . . [N: Treatment other than blanching preparatory to freezing]
- A23B7/045 . . . Thawing subsequent to freezing
- A23B7/05 . . . with addition of chemicals [N: or treatment with chemicals other than cryogenics, before or during cooling, e.g. in the form of an ice coating or frozen block]
- A23B7/055 with direct contact between the food and the chemical, e.g. liquid nitrogen, at cryogenic temperature
- A23B7/06 . Blanching ([machines therefor A23N12/00](#))
- A23B7/08 . Preserving with sugars ([marmalade, jam, fruit jellies A23L1/06](#))
- A23B7/08D . . . [N: in a solution of sugar]
- A23B7/10 . Preserving with acids; Acid fermentation
- A23B7/10F . . . [N: Leaf vegetables, e.g. sauerkraut]
- A23B7/12 . . . Apparatus for compressing sauerkraut
- A23B7/14 . Preserving or ripening with chemicals not covered by groups [A23B7/08](#) or [A23B7/10](#)
- A23B7/144 . . . in the form of gases, e.g. fumigation; Compositions or apparatus therefor [N: ([cooling without control of atmosphere composition A23B7/04](#))]
- A23B7/148 in a controlled atmosphere, e.g. partial vacuum, comprising only CO₂, N₂, O₂ or H₂O
- A23B7/152 in a controlled atmosphere comprising other gases in addition to CO₂, N₂, O₂ or H₂O; [N: [Elimination of such other gases](#)]
- A23B7/153 . . . in the form of liquids or solids
- A23B7/154 Organic compounds; Micro-organisms; Enzymes ([acid fermentation A23B7/10](#))
- A23B7/155 Micro-organisms; Enzymes; [N: [Antibiotics](#)]
- A23B7/157 Inorganic compounds
- A23B7/158 Apparatus for preserving using liquids
- A23B7/159 Apparatus for preserving using solids
- A23B7/16 . Coating with a protective layer; Compositions or apparatus therefor ([A23B7/08](#) takes precedence)
- A23B9/00 Preservation of edible seeds, e.g. cereals**
- A23B9/00T . . . [N: Processes or apparatus using pressure variation or mechanical force, e.g. shock, acceleration, shear stress, contortion]

- A23B9/02 . Preserving by heating
- A23B9/02F . . [N: with use of gases]
- A23B9/04 . . by irradiation or electric treatment
- A23B9/06 . Preserving by irradiation or electric treatment without heating effect
- A23B9/08 . Drying; Subsequent reconstitution
- A23B9/10 . Freezing; Subsequent thawing; Cooling
- A23B9/12 . . Thawing subsequent to freezing
- A23B9/14 . Coating with a protective layer; Compositions or apparatus therefor
- A23B9/16 . Preserving with chemicals
- A23B9/18 . . in the form of gases, e.g. fumigation; Compositions or apparatus therefor
- A23B9/20 . . . in a controlled atmosphere, e.g. partial vacuum, comprising only CO₂, N₂, O₂ or H₂O
- A23B9/22 . . . in a controlled atmosphere comprising other gases in addition to CO₂, N₂, O₂ or H₂O
- A23B9/24 . . in the form of liquids or solids
- A23B9/26 . . . Organic compounds; Micro-organisms; Enzymes
- A23B9/28 Micro-organisms; Enzymes; [N: Antibiotics]
- A23B9/30 . . . Inorganic compounds
- A23B9/32 . . . Apparatus for preserving using liquids
- A23B9/34 . . . Apparatus for preserving using solids