

A23B

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

Definition statement

This place covers:

Processes or apparatus for the preservation of foods or foodstuffs in general, e.g. by pasteurising, sterilising, heating, freezing, drying, pressurising, irradiation or treatment with chemicals, specially adapted for foods or foodstuffs and where the nature of the product is not relevant or specified.

Processes for preserving meat, sausages, fish, fish products, eggs, egg products, fruit, vegetables (preservation of raw potatoes), edible seeds, milk, dairy products, edible oils or fats, flour, dough before baking, finished bakery products, non-alcoholic beverages, beverages from legumes, cocoa or cocoa products, tea, tea substitutes, herbal tea, tea containing beverages, coffee, coffee substitutes or coffee containing beverages by heating, drying, freezing, irradiating, smoking, using chemicals or microorganisms and compositions therefor.

Apparatus for preserving meat, sausages, fish, fish products, eggs, egg products, fruit, vegetables or edible seeds using liquids, solids or gases.

Apparatus, processes and compositions for coating meat, sausages, fish, fish products, eggs, egg products, fruit, vegetables or edible seeds with a protective layer.

Apparatus for compressing sauerkraut.

Chemical ripening of fruit or vegetables with liquids, solids or gases.

Preserved, ripened or canned products (i.e. meat, sausages, fish, fish products, eggs, egg products, fruit, vegetables, edible seed, milk, dairy products, edible oils or fats, flour, dough before baking, finished bakery products, non-alcoholic beverages, beverages from legumes, cocoa or cocoa products, tea, tea substitutes, herbal tea, tea containing beverages, coffee, coffee substitutes or coffee containing beverages), per se.

Relationships with other classification places

Preserving, protecting or purifying packages or package contents in association with packaging and apparatus therefor are classified in group [B65B 55/00](#). Preserving meat, sausages, fish, fish products, eggs, egg products, fruit, vegetables, edible seeds milk, dairy products, edible oil or fats, flour, dough before baking, finished bakery products, non-alcoholic beverages, beverages from legumes, cocoa or cocoa products, tea, tea substitutes, herbal tea, tea containing beverages, coffee, coffee substitutes or coffee containing beverages and apparatus therefor not restricted to packaging are classified in subclass [A23B](#).

Group [B65D 81/00](#) deals with containers, packaging elements or packages, for contents presenting particular transport or storage problems or adapted to be used for non-packaging purposes after removal of contents. More specifically, group [B65D 81/28](#) deals with applications of food preservatives, fungicides, pesticides or animal repellants to the container or the packaging material, per se to prevent deterioration or decay.

The preservation of alcoholic beverages is classified in group [C12H 1/00](#) and the preservation of non-alcoholic beverages by removal of alcohol is classified in group [C12H 3/00](#).

References

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Applying food preservatives in packages	B65D 81/28
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Biocides	A01N
Preservation of plants or parts thereof	A01N 3/00
Treatment of flour or dough for baking; Baking; Bakery products	A21D
Dairy products; Milk or cheese substitutes	A23C
Tea; Tea substitutes; Preparations thereof	A23F 3/00
Coffee; Coffee substitutes; Preparations thereof	A23F 5/00
General methods for cooking foods	A23L 5/10
Cleaning vegetables, fruits and other foodstuffs	A23L 5/57
Meat products in general	A23L 13/00
Egg products in general	A23L 15/00
Food-from-the-sea products, fish products	A23L 17/00
Preparation of fruits and vegetables	A23L 19/00
Dried cooked potatoes	A23L 19/12
Marmalades; Jams; Jellies; Other similar fruit or vegetable compositions; Simulated fruit products; Their preparation or treatment	A23L 21/10
Food consisting mainly of nut meats or seeds	A23L 25/00
Machines for washing or blanching fruits or vegetables in bulk in combination with subsequent drying	A23N 12/06
Machines for drying or roasting fruits or vegetables in bulk	A23N 12/08
Shaping foods in general	A23P 10/00
Kitchen equipment	A47J
Disinfection or sterilisation of materials or objects, in general; Accessories therefor	A61L 2/00
Preserving foods or foodstuffs in association with packaging method	B65B 55/00
Applications to the container or packaging material of food preservatives	B65D 81/24
Antioxidant compositions	C09K 15/00
Preserving fats or oils by using additives	C11B 5/00
Preservation of alcoholic beverages	C12H
Refrigeration machines, plants or systems; Combined heating and refrigeration systems	F25B
Refrigerators, cold rooms, ice-boxes, cooling or freezing apparatus not otherwise provided for	F25D
Devices for drying foodstuffs	F26B

Heat exchange in general	F28
Heating by electric, magnetic or electromagnetic fields	H05B 6/00

Special rules of classification

Group [A23B 2/00](#) 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.

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.

Non-limiting examples of situations where double classification is necessary.

When classifying in subclass [A23B](#), [A23V 2200/00](#) indexing schemes relating to food composition, food ingredients and processes and [A23V 2400/00](#) indexing schemes relating to lactic or propionic acid bacteria used in foodstuffs or food preparation should also be used, in accordance with indexing schemes [A23V 2200/00](#) and [A23V 2400/00](#) classification rules (at the end of the definition).

It should be observed, however, that the indexing scheme [A23V 2400/00](#) is not specifically associated with the subclass [A23B](#), but may be used in combination with other food-related subclasses such as subclass [A23C](#).

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

coffee	stimulant product or beverage made from roasted seeds that are commonly called coffee beans and come from a plant of the genus <i>Coffea</i> , e.g. <i>Coffea arabica</i> or <i>Coffea canephora</i>
coffee substitutes	coffee substitutes (solid or liquid) are non-coffee products normally without caffeine, used to substitute coffee while preserving its taste. Grain coffee and other substitutes can be made by roasting or decocting various organic substances. Common ingredients include acorn, barley and malt, beech nut, chicory root, corn, fig or rye.
edible oil	edible or cooking oil that is a fat of plant, animal or microbial origin, is liquid at room temperature and is suitable for food use. Some of the many different kinds of edible vegetable oils include: olive oil, palm oil, soybean oil, canola oil, pumpkin seed oil, corn oil, sunflower oil, safflower oil, peanut oil, grape seed oil, sesame oil, argan oil and rice bran oil. Many other types of vegetable oil are also used in cooking. The generic expression "vegetable oil", when used to characterise an oil-based cooking product, refers to a blend of different oils, often based on palm, corn, soy or sunflower oils. Fish oil is an example of an edible oil of animal origin. Microbial oils are also included in this category.
egg product	all or a portion of the contents found inside eggs that have been separated from the shell. They may be pasteurised in a food processing plant, with or without added ingredients and are intended for human consumption, such as dried, frozen or liquid eggs. Egg products do not include food that contains eggs only in a relatively small proportion, such as cake mixes.

fat	unctuous substance of little consistency that melts easily, known in chemistry as body fat and present in various parts of the human or animal body. Fats consist of a wide group of compounds that are generally soluble in organic solvents and largely insoluble in water. Chemically, fats are generally triesters of glycerol and fatty acids. Fats may be either solid or liquid at normal room temperature, depending on their structure and composition. Although the terms "oils", "fats" and "lipids" are all used to refer to fats, "oils" is usually used to refer to fats that are liquids at normal room temperature, while "fats" is usually used to refer to fats that are solids at normal room temperature. The term "lipids" is used to refer to both liquid and solid fats, along with other related substances. Fats form a category of lipids that are distinguished from other lipids by their chemical structure and physical properties. This category of molecules is important for many forms of life, serving both structural and metabolic functions. They are an important part of the diet of most heterotrophs (including humans). Fats or lipids are broken down in the body by enzymes called lipases produced in the pancreas.
fish	any fish, including shellfish, crustaceans and marine animals (marine being defined as "of, found in or produced by the sea"), and any parts, products or by-products thereof
fish product	product containing a predominant amount of fish
oil	substance that is in a viscous liquid state ("oily") at ambient temperatures or slightly warmer and is both hydrophobic (immiscible with water) and lipophilic (miscible with other oils). This general definition includes compound classes with otherwise unrelated chemical structures, properties and uses, including vegetable oils, petrochemical oils and volatile essential oils. Oil is a nonpolar substance. The term "oil" is used for any substance that does not mix with water and has a greasy feel, such as petroleum (or crude oil) and heating oil, regardless of its chemical structure.
herbal tea	any <i>Camellia sinensis</i> -free product or beverage prepared by hot water infusion of plant material, usually leaves but also including fruits, flowers and possibly even bark or other parts. Herbal teas are belonging to the group of tea substitutes.
tea	stimulant product or beverage made from the leaves of the traditional tea plant (<i>Camellia sinensis</i>)
tea substitutes	tea substitutes (solid or liquid) are non-tea products, i.e. not coming from the traditional tea plant (<i>Camellia sinensis</i> , e.g. mate (<i>Ilex paraguariensis</i>), lemon balm (<i>Melissa officinalis</i>) or rose hips (<i>Rosa canina</i>); cf. "herbal tea"

A23B 4/015

Preserving by irradiation or electric treatment without heating effect

Special rules of classification

This group includes other physical treatments e.g. high pressure, ultrasound

A23B 4/16**in the form of gases, e.g. fumigation; Compositions or apparatus therefor****Definition statement***This place covers:*

Preserving with gases, including controlled atmosphere and vacuum

A23B 4/20**Organic compounds; Microorganisms; Enzymes****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Acid fermentation	A23B 4/12
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A23B 4/24**Inorganic compounds****Definition statement***This place covers:*

Inorganic compounds, e.g. mineral acids, hydrogen peroxide, ozone or carbon dioxide.

References**Informative references***Attention is drawn to the following places, which may be of interest for search:*

Preserving by inorganic salts other than kitchen salt or mixtures thereof with organic compounds, e.g. biochemical compounds	A23B 4/027
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A23B 5/015**Preserving by irradiation or electric treatment without heating effect****Definition statement***This place covers:*

Any physical treatment with no heating e.g. high pressure, ultrasound

A23B 7/015**Preserving by irradiation or electric treatment without heating effect****Definition statement***This place covers:*

Any physical treatment with no heating, e.g. high pressure, ultrasound

A23B 7/144

in the form of gases, e.g. fumigation; Compositions or apparatus therefor

References***Informative references***

Attention is drawn to the following places, which may be of interest for search:

Freezing; Subsequent thawing; Cooling	A23B 7/04
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A23B 7/154

Organic compounds; Microorganisms; Enzymes

References***Informative references***

Attention is drawn to the following places, which may be of interest for search:

Preserving with acids; Acid fermentation	A23B 7/10
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