

**CPC****COOPERATIVE PATENT CLASSIFICATION****A23C**

**DAIRY PRODUCTS, e.g. MILK, BUTTER, CHEESE ; MILK OR CHEESE SUBSTITUTES ; MAKING THEREOF** ( obtaining protein compositions for foodstuffs, { e.g. from milk } , [A23J 1/00](#) ; preparation of peptides, e.g. of proteins, in general [C07K 1/00](#) )

**NOTE**

This subclass covers:

- the chemical aspects of making dairy products
- the apparatus used for performing techniques provided for therein, e.g. for concentration, evaporation, drying, preservation, or sterilisation, unless such apparatus is specifically provided for in another subclass, e.g. [A01J](#) for treatment of milk or cream for manufacture of butter or cheese.

**Guidance heading:** General dairy technology

**A23C 1/00**      **Concentration, evaporation or drying** ( products obtained thereby [A23C 9/00](#) ; making butter powder [A23C 15/14](#) , cheese powder [A23C 19/086](#) ; evaporating in general [B01D 1/00](#) )

- [A23C 1/01](#)      . Drying in thin layers
- [A23C 1/03](#)      . . on drums or rollers
- [A23C 1/04](#)      . by spraying into a gas stream
- [A23C 1/045](#)      . . { by simultaneously or separately spraying of two different liquid products other than water or steam; by separate addition of additives other than milk products or lactose in the spray-dryer }
- [A23C 1/05](#)      . . combined with agglomeration { granulation or coating }
- [A23C 1/06](#)      . Concentration by freezing out the water
- [A23C 1/08](#)      . . Freeze-drying
- [A23C 1/10](#)      . Foam drying ( [A23C 1/04](#) , [A23C 1/08](#) take precedence )
- [A23C 1/12](#)      . Concentration by evaporation
- [A23C 1/14](#)      . combined with other treatment ( [A23C 3/00](#) , [A23C 9/00](#) take precedence )
- [A23C 1/16](#)      . . using additives

**A23C 3/00**      **Preservation of milk or milk preparations** ( of cream [A23C 13/08](#) ; of butter [A23C 15/18](#) ; of cheese [A23C 19/097](#) )

- [A23C 3/005](#)      . { Storing or packaging in a vacuum or in inert or sterile gaseous atmosphere ( impregnation with inert gases [A23C 9/1524](#) ) }



- A23C 3/02 . by heating ( [A23C 3/07](#) takes precedence )
- A23C 3/023 .. in packages
- A23C 3/027 ... progressively transported through the apparatus
- A23C 3/03 .. the materials being loose unpacked
- A23C 3/031 ... { Apparatus through which the material is transported non progressively; Temperature-maintaining holding tanks or vats with discontinuous filling or discharge }
- A23C 3/033 ... and progressively transported through the apparatus
- A23C 3/0332 .... { in contact with multiple heating plates }
- A23C 3/0335 .... { the milk being heated by electrical or mechanical means, e.g. by friction }
- A23C 3/0337 .... { the milk flowing through with indirect heat exchange, containing rotating elements, e.g. for improving the heat exchange }
- A23C 3/037 .... in direct contact with the heating medium, e.g. steam
- A23C 3/0375 ..... { by pulverisation of the milk, including free falling film }
- A23C 3/04 . by freezing or cooling
- A23C 3/045 .. { Freezing in loose unpacked form }
- A23C 3/05 .. in packages
- A23C 3/055 ... { Freezing in packages }
- A23C 3/07 . by irradiation, e.g. by microwaves; { by sonic or ultrasonic waves }
- A23C 3/073 .. { by sonic or ultrasonic waves }
- A23C 3/076 .. { by ultraviolet or infrared radiation }
- A23C 3/08 . by addition of preservatives ( addition of micro-organisms or enzymes [A23C 9/12](#) , of other substances [A23C 9/152](#) )
- A23C 3/085 .. { Inorganic compounds, e.g. lactoperoxidase - H<sub>2</sub>O<sub>2</sub> systems }

## **A23C 7/00 Other dairy technology**

- A23C 7/02 . Chemical cleaning of dairy apparatus ( cleaning in general [B08B](#) , e.g. [B08B 3/08](#) ) ; Use of sterilisation methods therefor ( sterilisation methods per se [A61L](#) )
- A23C 7/04 . Removing unwanted substances { other than lactose or milk proteins } from milk ( by filtering [A01J 9/02](#) , [A01J 11/06](#) )
- A23C 7/043 .. { using chemicals in liquid or solid state, e.g. flocculating, adsorbing or extracting agents ( [A23C 9/146](#) and [A23C 9/148](#) take precedence ) }
- A23C 7/046 .. { by centrifugation without using chemicals, e.g. bacto-fugation; re-use of bacto-fugate }

## **Guidance heading: Dairy products ; Processes specially adapted therefor**

- A23C 9/00 Milk preparations ; Milk powder or milk powder preparations ( [21/06](#) takes precedence; preservation [A23C 3/00](#) ; chocolate milk [A23G 1/00](#) ; ice-cream, mixtures for preparation of ice-cream [A23G 9/00](#) ; puddings, dry powder puddings [A23L 1/187](#) )**
- A23C 9/005 . { Condensed milk; Sugared condensed milk ( [A23C 1/06](#) and [A23C 1/12](#) take



precedence ) }

- A23C 9/12 . Fermented milk preparations ; Treatment using micro-organisms or enzymes ( [whey preparations A23C 21/00](#) )
- A23C 9/1203 . . { Addition of, or treatment with, enzymes or micro-organisms other than lactobacteriaceae }
- A23C 9/1206 . . . { Lactose hydrolysing enzymes, e.g. lactase, beta-galactosidase }
- A23C 9/1209 . . . { Proteolytic or milk coagulating enzymes, e.g. trypsin }
- A23C 9/1213 . . . { Oxidation or reduction enzymes, e.g. peroxidase, catalase, dehydrogenase }
- A23C 9/1216 . . . { Other enzymes }
- A23C 9/122 . . { Apparatus for preparing or treating fermented milk products }
- A23C 9/1223 . . . { for making stirred yoghurt; Apparatus with agitating or stirring means; Continuous bulk fermentation, heating or cooling, i.e. continuous inlet and outlet flow of yoghurt }
- A23C 9/1226 . . . { for making set yoghurt in containers without stirring, agitation or transport of the yoghurt or the containers during incubation, heating or cooling; Domestic yoghurt apparatus without agitating means }
- A23C 9/123 . . using only micro-organisms of the genus lactobacteriaceae ; Yoghurt ( [A23C 9/13 takes precedence](#) )
- A23C 9/1232 . . . { in powdered, granulated or dried solid form }
- A23C 9/1234 . . . { characterised by using a Lactobacillus sp. other than Lactobacillus Bulgaricus, including Bifidobacterium sp. }
- A23C 9/1236 . . . { using Leuconostoc, Pediococcus or Streptococcus sp. other than Streptococcus Thermophilus; Artificial sour buttermilk in general ( [A23C 9/1234 and A23C 17/02 take precedence](#) ) }
- A23C 9/1238 . . . { using specific L. bulgaricus or S. thermophilus micro-organisms; using entrapped or encapsulated yoghurt bacteria; Physical or chemical treatment of L. bulgaricus or S. thermophilus cultures; Fermentation only with L. bulgaricus or only with S. thermophilus }
- A23C 9/127 . . using micro-organisms of the genus lactobacteriaceae and other micro-organisms or enzymes e.g. kefir, koumiss ( [A23C 9/13 takes precedence](#) )
- A23C 9/1275 . . . { using only lactobacteriaceae for fermentation in combination with enzyme treatment of the milk product; using enzyme treated milk products for fermentation with lactobacteriaceae }
- A23C 9/13 . . using additives
- A23C 9/1307 . . . { Milk products or derivatives; Fruit or vegetable juices; Sugars, sugar alcohols, sweeteners; Oligosaccharides; Organic acids or salts thereof or acidifying agents; Flavours, dyes or pigments; Inert or aerosol gases; Carbonation methods }
- A23C 9/1315 . . . { Non-milk proteins or fats; Seeds, pulses, cereals or soja; Fatty acids, phospholipids, mono- or diglycerides or derivatives therefrom; Egg products }
- A23C 9/1322 . . . { Inorganic compounds; Minerals, including organic salts thereof, oligo-elements; Amino-acids, peptides, protein-hydrolysates or derivatives; Nucleic acids or derivatives; Yeast extract or autolysate; Vitamins; Antibiotics; Bacteriocins }
- A23C 9/133 . . . Fruit or vegetables
- A23C 9/137 . . . Thickening substances
- A23C 9/14 . in which the chemical composition of the milk is modified by non-chemical treatment



**NOTE**

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]

- A23C 9/142 . . by dialysis, reverse osmosis or ultrafiltration ( [A23C 9/144](#) takes precedence )
- A23C 9/1422 . . . { by ultrafiltration, microfiltration or diafiltration of milk, e.g. for separating protein and lactose; Treatment of the UF permeate }
- A23C 9/1425 . . . { by ultrafiltration, microfiltration or diafiltration of whey, e.g. treatment of the UF permeate }
- A23C 9/1427 . . . { by dialysis, reverse osmosis or hyperfiltration, e.g. for concentrating or desalting }
- A23C 9/144 . . by electrical means, e.g. electrodialysis
- A23C 9/146 . . by ion-exchange
- A23C 9/1465 . . . { Chromatographic separation of protein or lactose fraction; Adsorption of protein or lactose fraction followed by elution }
- A23C 9/148 . . by molecular sieve or gel filtration { or chromatographic treatment ( [A23C 9/1465](#) takes precedence ) }
  
- A23C 9/15 . Reconstituted or recombined milk products containing neither non-milk fat nor non-milk proteins ( containing thickening substances [A23C 9/154](#) ; mixtures of whey, with milk products or milk components [A23C 21/06](#) )
- A23C 9/1504 . . { Spreads, semi-solid products }
- A23C 9/1508 . . { Dissolving or reconstituting milk powder; Reconstitution of milk concentrate with water; Standardisation of fat content of milk }
- A23C 9/1512 . . { containing isolated milk or whey proteins, caseinates or cheese; Enrichment of milk products with milk proteins in isolated or concentrated form, e.g. ultrafiltration retentate }
- A23C 9/1516 . . { Enrichment or recombination of milk ( excepted whey ) with milk fat, cream of butter without using isolated or concentrated milk proteins }
  
- A23C 9/152 . containing additives ( fermented milk preparations containing additives [A23C 9/13](#) )
- A23C 9/1522 . . { Inorganic additives, e.g. minerals, trace elements; Chlorination or fluoridation of milk; Organic salts or complexes of metals other than sodium or potassium; Calcium enrichment of milk }
- A23C 9/1524 . . { Inert gases, noble gases, oxygen, aerosol gases; Processes for foaming }
- A23C 9/1526 . . { Amino acids; Peptides; Protein hydrolysates; Nucleic acids; Derivatives thereof }
- A23C 9/1528 . . { Fatty acids; Mono- or diglycerides; Petroleum jelly; Paraffine; Phospholipids; Derivatives thereof }
- A23C 9/154 . . containing thickening substances, eggs or cereal preparations ; Milk gels
- A23C 9/1542 . . . { Acidified milk products containing thickening agents or acidified milk gels, e.g. acidified by fruit juices ( fermentation [A23C 9/12](#) ) }
- A23C 9/1544 . . . { Non-acidified gels, e.g. custards, creams, desserts, puddings, shakes or foams, containing eggs or thickening or gelling agents other than sugar; Milk products containing natural or microbial polysaccharides, e.g. cellulose or cellulose derivatives; Milk products containing nutrient fibres }
- A23C 9/1546 . . . { in powdered, granulated or dried solid form }



- A23C 9/1548 . . . { Non-dried milk gels, creams or semi-solid products obtained by heating milk with a sugar without using gums, e.g. milk jam }
- A23C 9/156 . . Flavoured milk preparations; { Addition of fruits, vegetables, sugars, sugar alcohols, sweeteners } ( [A23C 9/154](#) takes precedence )
- A23C 9/1565 . . . { Acidified milk products, e.g. milk flavoured with fruit juices ( [A23C 9/1542](#) takes precedence; fermentation [A23C 9/12](#) ) }
- A23C 9/158 . . containing vitamins or antibiotics
- A23C 9/1585 . . . { Antibiotics; Bacteriocins; Fungicides from micro-organisms }
- A23C 9/16 . Agglomerating or granulating milk powder ; Making instant milk powder ; Products obtained thereby ( [A23C 1/05](#) , [A23C 9/18](#) take precedence )
- A23C 9/18 . Milk in dried and compressed or semi-solid form
- A23C 9/20 . Dietetic milk products not covered by groups [A23C 9/12](#) to [A23C 9/18](#)
- A23C 9/203 . . { containing bifidus-active substances, e.g. lactulose; containing oligosaccharides }
- A23C 9/206 . . { Colostrum; Human milk }
- A23C 11/00** **Milk substitutes, e.g. coffee whitener compositions** ( cheese substitutes [A23C 20/00](#) ; butter substitutes [A23D](#) ; cream substitutes [A23L 1/19](#) )
- A23C 11/02 . containing at least one non-milk component as source of fats or proteins ( [A23C 19/055](#) , [A23C 21/04](#) take precedence )
- A23C 11/04 . . containing non-milk fats but no non-milk proteins ( [A23C 11/08](#) , [A23C 11/10](#) take precedence )
- A23C 11/045 . . . { obtained by mixing the non-fat components in powdered form with the fats or by dry mixing of the components }
- A23C 11/06 . . containing non-milk proteins ( [A23C 11/08](#) , [A23C 11/10](#) take precedence )
- A23C 11/065 . . . { Microbial proteins, inactivated yeast or animal proteins }
- A23C 11/08 . . containing caseinates but no other milk proteins nor milk fats
- A23C 11/10 . . containing or not lactose but no other milk components as source of fats, carbohydrates or proteins, e.g. soy milk
- A23C 11/103 . . . { containing only proteins from pulses, oilseeds or nuts, e.g. soy or nut milk }
- A23C 11/106 . . . . { Addition of, or treatment with, micro-organisms ( [A23C 20/025](#) and [A23L 1/2118](#) take precedence ) }
- A23C 13/00** **Cream ; Cream preparations ; Making thereof** ( coffee whitener compositions [A23C 11/00](#) ; cream substitutes [A23L 1/19](#) )
- A23C 13/08 . Preservation
- A23C 13/085 . . { Freezing; Subsequent melting }
- A23C 13/10 . . by addition of preservatives ( [A23C 13/14](#) , [A23C 13/16](#) take precedence )
- A23C 13/12 . Cream preparations ( ice-cream [A23G 9/00](#) )
- A23C 13/125 . . { in powdered, granulated or solid form }
- A23C 13/14 . . containing milk products or { non-fat } milk components
- A23C 13/16 . . containing, or treated with, micro-organisms, enzymes, or antibiotics ; Sour cream



A23C 13/165 . . . { Making sour cream by chemical or physical means only }

**A23C 15/00 Butter ; Butter preparations ; Making thereof ( butter substitutes [A23D](#) )**

A23C 15/02 . Making thereof

A23C 15/04 . . from butter oil or anhydrous butter

A23C 15/06 . . Treating cream { or milk } prior to phase inversion

A23C 15/065 . . . { Addition of a treatment with micro-organisms or enzymes; Addition of cultured milk products }

A23C 15/12 . Butter preparations

A23C 15/123 . . { Addition of micro-organisms or cultured milk products; Addition of enzymes; Addition of starter cultures other than destillates }

A23C 15/126 . . { Butter containing a minority of vegetable oils; Enrichment of butter with fatty acids }

A23C 15/14 . . Butter powder ; Butter oil, i.e. melted butter, e.g. ghee; { Anhydrous butter }

A23C 15/145 . . . { Removal of steroids, e.g. cholesterol or free acids; Fractionation of anhydrous milkfat by extraction with solvents other than solvent crystallisation or with supercritical gases or by distillation }

A23C 15/16 . . Butter having reduced fat content

A23C 15/165 . . . { prepared by addition of microorganisms; Cultured spreads }

A23C 15/18 . Preservation

A23C 15/20 . . by addition of preservatives { or antioxidants }

**A23C 17/00 Buttermilk ; Buttermilk preparations ( [A23C 9/14](#) takes precedence; preservation [A23C 3/00](#) )**

A23C 17/02 . containing, or treated with, micro-organisms or enzymes

**A23C 19/00 Cheese ; Cheese preparations ; Making thereof ( cheese substitutes [A23C 20/00](#) ; casein [A23J 1/20](#) )**

A23C 19/02 . Making cheese curd

A23C 19/024 . . using continuous procedure

A23C 19/0245 . . . { with immobilized enzymes or micro-organisms }

A23C 19/028 . . without substantial whey separation from coagulated milk

A23C 19/0285 . . . { by dialysis or ultrafiltration }

A23C 19/032 . . characterised by the use of specific micro-organisms, or enzymes of microbial origin

A23C 19/0321 . . . { Propionic acid bacteria }

A23C 19/0323 . . . { using only lactic acid bacteria, e.g. *Pediococcus* and *Leuconostoc* species; *Bifidobacteria*; Microbial starters in general ( using moulds [A23C 19/0682](#) ) }

A23C 19/0325 . . . { using yeasts, alone or in combination with lactic acid bacteria or with fungi, without using other bacteria }

A23C 19/0326 . . . { Rennet produced by fermentation e.g. microbial rennet; Rennet produced by genetic engineering }



- A23C 19/0328 . . . { Enzymes other than milk clotting enzymes, e.g. lipase, beta-galactosidase }
- A23C 19/04 . . characterised by the use of specific enzymes of vegetable or animal origin ( [A23C 19/032](#) takes precedence )
- A23C 19/041 . . . { Proteolytic or milk clotting enzymes from plants or vegetables, e.g. papain, ficin, bromelain }
- A23C 19/043 . . . { Enzymes other than proteolytic enzymes or milk clotting enzymes, e.g. lipase, lysosyme }
- A23C 19/045 . . Coagulation of milk without rennet or rennet substitutes { followed by whey separation }
- A23C 19/0455 . . . { Coagulation by direct acidification without fermentation of the milk, e.g. by chemical or physical means }
- A23C 19/05 . . Treating milk before coagulation ; Separating whey from curd ( [19/097](#), { [A23C 19/045](#) } take precedence )
- A23C 19/051 . . . { Acidifying by combination of acid fermentation and of chemical or physical means }
- A23C 19/052 . . . { Acidifying only by chemical or physical means }
- A23C 19/053 . . . { Enrichment of milk with whey, whey components, substances recovered from separated whey, isolated or concentrated proteins from milk }
- A23C 19/054 . . . { using additives other than acidifying agents, NaCl, CaCl<sub>2</sub>, dairy products, proteins, fats, enzymes or micro-organisms }
- A23C 19/055 . . Addition of non-milk fats or non-milk proteins, { polyol fatty acid polyesters or mineral oils }
  
- A23C 19/06 . Treating cheese curd after whey separation ; Products obtained thereby ( [A23C 19/097](#) takes precedence )
- A23C 19/061 . . { Addition of, or treatment with, micro-organisms ( [A23C 19/0682](#) takes precedence ) }
- A23C 19/062 . . . { using only lactic acid bacteria, e.g. pediococcus, leconostoc or bifidus sp., or propionic acid bacteria; Treatment with non-specified acidifying bacterial cultures }
- A23C 19/063 . . { Addition of, or treatment with, enzymes or cell-free extracts of micro-organisms }
- A23C 19/064 . . Salting
- A23C 19/068 . . Particular types of cheese
- A23C 19/0682 . . . { Mould-ripened or bacterial surface ripened cheeses }
- A23C 19/0684 . . . { Soft uncured Italian cheeses, e.g. Mozzarella, Ricotta, Pasta filata cheese; Other similar stretched cheeses }
- A23C 19/0686 . . . { Cheese from whey, e.g. mysost }
- A23C 19/0688 . . . { Hard cheese or semi-hard cheese with or without eyes ( [A23C 19/072](#) takes precedence ) }
- A23C 19/072 . . . Cheddar type { or similar hard cheeses without eyes }
- A23C 19/076 . . . Soft unripened cheese, e.g. cottage or cream cheese
- A23C 19/0765 . . . . { Addition to the curd of additives other than acidifying agents, dairy products, proteins except gelatine, fats, enzymes, micro-organisms, NaCl, CaCl<sub>2</sub> or KCl; Foamed fresh cheese products }
- A23C 19/08 . . . Process cheese preparations ; Making thereof, e.g. melting, emulsifying, sterilizing
- A23C 19/081 . . . . { Surface melting }
- A23C 19/082 . . . . Adding substances to the curd before or during melting ; Melting salts



- A23C 19/084 . . . . Treating the curd, or adding substances thereto, after melting ( [adding non-milk components A23C 19/093](#) )
- A23C 19/086 . . Cheese powder ; Dried cheese preparations
- A23C 19/09 . . Other cheese preparations ; Mixtures of cheese with other foodstuffs ( [preservation A23C 19/097](#) )
- A23C 19/0904 . . . { Liquid cheese products, e.g. beverages, sauces }
- A23C 19/0908 . . . { Sliced cheese; Multilayered or stuffed cheese; Cheese loaves }
- A23C 19/0912 . . . { Fried, baked or roasted cheese products, e.g. cheese cakes; Foamed cheese products, e.g. souffl s; Expanded cheese in solid form }
- A23C 19/0917 . . . { Addition, to cheese or curd, of whey, whey components, substances recovered from separated whey, isolated or concentrated proteins from milk }
- A23C 19/0921 . . . { Addition, to cheese or curd, of minerals, including organic salts thereof, trace elements, amino acids, peptides, protein hydrolysates, nucleic acids, yeast extracts or autolysate, vitamins or derivatives of these compounds }
- A23C 19/0925 . . . { Addition, to cheese or curd, of colours, synthetic flavours or artificial sweeteners, including sugar alcohols }
- A23C 19/093 . . . Addition of non-milk fats or non-milk proteins, { polyol fatty acid polyesters or mineral oils }
  
- A23C 19/097 . Preservation
- A23C 19/0973 . . { Pasteurisation; Sterilisation; Hot packaging }
- A23C 19/0976 . . { Freezing; Treating cheese in frozen state; Thawing of frozen cheese }
- A23C 19/10 . . Addition of preservatives { ( [enzymes or micro-organisms, see A23C 19/032](#) , [A23C 19/04](#) , [A23C 19/061](#) and [A23C 19/063](#) ) }
- A23C 19/105 . . . { Inorganic compounds; Inert or noble gases; Carbon dioxide }
- A23C 19/11 . . . of antibiotics { or bacteriocins }
  
- A23C 19/14 . Treating cheese after having reached its definite form, e.g. ripening, smoking ( [preservation A23C 19/097](#) )
- A23C 19/16 . . Covering the cheese surface, e.g. with paraffin wax
- A23C 19/163 . . . { with a non-edible liquid or semi-liquid coating, e.g. wax, polymer dispersions ( [in combination with an edible coating A23C 19/16](#) ) }
- A23C 19/166 . . . { with non-edible preformed foils, films or bandages }
  
- A23C 20/00 Cheese substitutes ( [A23C 19/055](#) , [A23C 19/093](#) take precedence )**
  
- A23C 20/005 . { mainly containing proteins from pulses or oilseeds, e.g. soy curd, tofu }
- A23C 20/02 . containing neither milk components, nor caseinate, nor lactose, as sources of fats, proteins or carbohydrates
- A23C 20/025 . . { mainly containing proteins from pulses or oilseeds, e.g. soy curd, tofu }
  
- A23C 21/00 Whey ; Whey preparations ( [A23C 1/00](#) , [A23C 3/00](#) , [A23C 9/14](#) take precedence )**
  
- A23C 21/02 . containing, or treated with, micro-organisms or enzymes
- A23C 21/023 . . { Lactose hydrolysing enzymes, e.g. lactase, B-galactosidase }
- A23C 21/026 . . { containing, or treated only with, lactic acid producing bacteria, bifidobacteria or



propionic acid bacteria }

- A23C 21/04 . containing non-milk components as source of fats or proteins
- A23C 21/06 . Mixtures of whey with milk products or milk components
- A23C 21/08 . containing other organic additives, e.g. vegetable or animal products
- A23C 21/10 . containing inorganic additives

## **A23C 23/00 Other dairy products**

## **A23C 2200/00 Special features**

## **A23C 2210/00 Physical treatment of dairy products ( not used, see subgroups )**

- A23C 2210/05 . Conventional drying followed by fluidised bed drying ; Fluidised bed drying at the bottom of a spray-drier
- A23C 2210/10 . General processes or apparatus not classified in [A23C 3/0375](#) for direct contact of a falling film of liquid with steam
- A23C 2210/15 . High pressure treatment
- A23C 2210/20 . Treatment using membranes, including sterile filtration ( not used, see subgroups )
- A23C 2210/202 . . Treatment of milk with a membrane before or after fermentation of the milk, e.g UF of diafiltration
- A23C 2210/204 . . Use of a membrane during fermentation of milk
- A23C 2210/206 . . Membrane filtration of a permeate obtained by ultrafiltration, nanofiltration or microfiltration
- A23C 2210/208 . . Removal of bacteria by membrane filtration ; Sterile filtration of milk products
- A23C 2210/25 . Separating and blending ( not used, see subgroups )
- A23C 2210/252 . . Separating a milk product in at least two fractions followed by treatment of at least one of the fractions and remixing at least part of the two fractions
- A23C 2210/254 . . Cream is separated from milk, one of the fractions is treated and at least part of the cream is remixed with the milk
- A23C 2210/256 . . Removal or separation of bacteria, or a fraction containing bacteria, by centrifugation ; Bactofugation
- A23C 2210/258 . . Separation or recuperation of fats or lipids from whey or whey products
- A23C 2210/30 . Whipping, foaming, frothing or aerating dairy products
- A23C 2210/40 . Microencapsulation ; Encapsulation of particles

## **A23C 2220/00 Biochemical treatment ( not used, see subgroups below )**

- A23C 2220/10 . Enzymatic treatment ( not used, see subgroups below )



- A23C 2220/102 . . Enzymatic treatment in diffusion reactors, e.g. membrane reactors, without immobilisation of the enzyme
- A23C 2220/104 . . Enzymatic treatment with immobilised enzymes
- A23C 2220/106 . . Enzymatic treatment with enzymes in microgranules or soluble matrices ; Entrapment of enzymes or making enzyme aggregates for delayed solubility ; Complexation of enzymes
  
- A23C 2220/20 . Treatment with micro-organisms ( [not used, see subgroups below](#) )
- A23C 2220/202 . . Genetic engineering of microorganisms used in dairy technology
- A23C 2220/204 . . Use of bacteria which are encapsulated, entrapped or immobilised ; Fermentation with these bacteria
- A23C 2220/206 . . Slime forming bacteria ; Exopolysaccharide or thickener producing bacteria, ropy cultures, so-called filant strains
- A23C 2220/208 . . Fermentation of skim milk or milk and its addition in a small quantity to unfermented skim milk or milk, e.g. cheese milk ; Addition of yoghurt to cheese milk
  
- A23C 2230/00 Aspects relating to animal feed or genotype ( [not used, see subgroups below](#) )**
- A23C 2230/05 . Milk or milk products from transgenic animals
- A23C 2230/10 . Animal milk with modified composition due to a specific feed
- A23C 2230/15 . Animal milk with modified composition due to manipulation of the animal, e.g. animal milk comprising antibodies, selection of animals having specific genotypes
  
- A23C 2240/00 Use or particular additives or ingredients ( [not used, see subgroups below](#) )**
- A23C 2240/05 . Milk products enriched with milk fat globule membrane
- A23C 2240/10 . Dairy products containing sterols or sterol derivatives
- A23C 2240/15 . Use of plant extracts, including purified and isolated derivatives thereof, as ingredient in dairy products
- A23C 2240/20 . Inert gas treatment, using e.g. noble gases or CO<sub>2</sub>, including CO<sub>2</sub> liberated by chemical reaction ; Carbonation of milk products
  
- A23C 2250/00 Particular aspects related to cheese ( [not used, see subgroups below](#) )**
- A23C 2250/05 . Emulsifying cheese ( [not used, see subgroups below](#) )
- A23C 2250/052 . . Emulsifying cheese below melting or pasteurisation temperature, e.g. below about 60 degrees
- A23C 2250/054 . . Emulsifying cheese without melting or emulsifying salts, e.g. citrates or (poly-) phosphates or alkali metal (bi-) carbonates or sodium or calcium salts of organic acids
- A23C 2250/10 . Cheese characterised by a specific form
- A23C 2250/15 . Shredded non-dried cheese



- A23C 2250/20 . Compacting shredded or ground cheese other than curd or small cheese pieces without melting
- A23C 2250/25 . Cheese with fat content lower than 0.5%, including cheese from skim milk, i.e. no addition of fats
- A23C 2250/30 . Blue veined cheeses, e.g. Roquefort, Gorgonzola, Stilton
- A23C 2250/35 . Smoking of cheese or curd ; Smoked cheeses ; Smoking of milk components before conversion to cheese
- A23C 2250/40 . Breaded cheese products, e.g. coating with a batter mix or other adhesive material followed by breading with crumbs or other particulate coating
- A23C 2250/45 . Cheese from buttermilk
- A23C 2260/00** **Particular aspects or types of dairy products ( [not used, see subgroups below](#) )**
- A23C 2260/05 . Concentrated yoghurt products, e.g. labneh, yoghurt cheese, non-dried non-frozen solid or semi-solid yoghurt products other than spreads ; Strained yoghurt ; Removal of whey from yoghurt
- A23C 2260/10 . Spreadable dairy products ( [not used, see subgroups below](#) )
- A23C 2260/102 . . Spreadable fermented dairy product ; Dairy spreads prepared by fermentation or containing microorganisms ; Cultured spreads ; Dairy spreads containing fermented milk products
- A23C 2260/104 . . Water-continuous butterlike spreads ; spreads from cream prepared without phase inversion
- A23C 2260/15 . Frozen dairy products ( [not used, see subgroups below](#) )
- A23C 2260/152 . . Frozen fermented milk products e.g. frozen yoghurt or yoghurt ice cream ; Frozen milk products containing living microorganisms.
- A23C 2260/154 . . Frozen non-fermented milk products
- A23C 2260/20 . Dry foaming beverage creamer or whitener, e.g. gas injected or containing carbonation or foaming agents, for causing foaming when reconstituted
- A23C 2260/25 . Dairy compositions providing for tooth protective effects, e.g. anticariogenic effects
- A23C 2270/00** **Aspects relating to packaging ( [not used, see subgroups below](#) )**
- A23C 2270/05 . Gelled or liquid milk product e.g. yoghurt, cottage cheese or pudding being one of the separate layers of a multilayered soft or liquid food product
- A23C 2270/10 . Dairy products filled into pressurised containers with dispensing means for atomisation or foaming
- A23C 2270/15 . Separate packaging or storing of foodstuffs or ingredients to be mixed prior to use or serving e.g. storing into separate compartments of a single container or into separate containers