

ECLA**EUROPEAN CLASSIFICATION****A61L**

METHODS OR APPARATUS FOR STERILISING MATERIALS OR OBJECTS IN GENERAL; DISINFECTION, STERILISATION, OR DEODORISATION OF AIR; CHEMICAL ASPECTS OF BANDAGES, DRESSINGS, ABSORBENT PADS, OR SURGICAL ARTICLES; MATERIALS FOR BANDAGES, DRESSINGS, ABSORBENT PADS, OR SURGICAL ARTICLES (preservation of bodies or disinfecting characterised by the agent employed A01N; preserving, e.g. sterilising, food or foodstuffs A23; preparations for medical, dental or toilet purposes A61K; preparation of ozone [C01B13/10](#))

[N: **WARNING** [C2010.04]

1. The following IPC groups are not used in the internal ECLA classification system. Subject matter covered by these groups is classified in the following ECLA groups:
 - [A61L33/10](#) covered by [A61L33/00H2](#)
 - [A61L33/14](#) covered by [A61L33/00H2](#)
 - [A61L33/16](#) covered by [A61L33/00H3](#)
 2. IPC7 groups [A61L2/07](#), [A61L2/32](#) and subgroups, and [A61L9/012](#) to [A61L9/014](#) might be incomplete as relevant documents might still be classified in the hierarchical higher groups
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Guide heading:**Disinfection or sterilising****A61L2/00**

Methods or apparatus for disinfecting or sterilising materials or objects other than foodstuffs or contact lenses; Accessories therefor (for contact lenses [A61L12/00](#); atomisers for disinfecting agents [A61M](#); sterilisation of packages or package contents in association with packaging [B65B55/00](#); treatment of water, waste water, sewage or sludge [C02F](#); disinfecting paper [D21H21/36](#); disinfecting devices for water closets [E03D](#); articles having provision for disinfection, see the relevant subclasses for these articles, e.g. [H04R1/12](#)) [C0203]

- A61L2/00P . [N: for pharmaceuticals, biologicals or living parts]
- A61L2/00P2 . . [N: using physical methods]
- A61L2/00P2A . . . [N: Filtration]
- A61L2/00P2E . . . [N: Heat]
- A61L2/00P2R . . . [N: Radiation] [N1004]
- A61L2/00P2R2 [N: Gamma radiation] [N1004]
- A61L2/00P2R4 [N: X-rays] [N1004]
- A61L2/00P2R6 [N: Ultraviolet radiation] [N1004]
- A61L2/00P2R8 [N: Visible light] [N1004]
- A61L2/00P2R10 [N: Infrared radiation] [N1004]
- A61L2/00P2R12 [N: Microwaves] [N1004]
- A61L2/00P2R14 [N: Particle radiation, e.g. electron-beam, alpha or beta radiation] [N1004]
- A61L2/00P2R16 [N: using a photocatalyst or photosensitiser] [N1004]

- A61L2/00P4 . . [N: using chemical substances]
- A61L2/00P4A . . . [N: Liquid substances]
- A61L2/00P4E . . . [N: Gaseous substances]

- A61L2/02 . using physical phenomena
- A61L2/02F . . [N: Filtration]
- A61L2/025 . . Ultrasonics [N0001]
- A61L2/03 . . Electric current [N0001]
- A61L2/03E . . . [N: Electrolysis]
- A61L2/04 . . Heat ([A61L2/08](#) takes precedence)
- A61L2/06 . . . Hot gas [C0203]
- A61L2/07 Steam [N0001]
- A61L2/08 . . Radiation
- A61L2/08B . . . [N: Gamma radiation] [N1004]
- A61L2/08D . . . [N: X-rays] [N1004]
- A61L2/08F . . . [N: Visible light] [N1004]
- A61L2/08H . . . [N: Infrared radiation] [N1004]
- A61L2/08J . . . [N: Particle radiation, e.g. electron-beam, alpha or beta radiation] [N1004]
- A61L2/08L . . . [N: using a photocatalyst or photosensitiser] [N1004]
- A61L2/10 . . . Ultra-violet radiation
- A61L2/12 . . . Microwaves
- A61L2/14 . . Plasma, i.e. ionised gases

- A61L2/16 . using chemical substances
- A61L2/18 . . Liquid substances [N: or solutions comprising solids or dissolved gases] [C1004]
- A61L2/18L . . . [N: Ozone dissolved in a liquid] [N1004]
- A61L2/18P . . . [N: Peroxide solutions] [N1004]
- A61L2/20 . . Gaseous substances, e.g. vapours
- A61L2/20C . . . [N: Ozone]
- A61L2/20D . . . [N: Formaldehyde]
- A61L2/20E . . . [N: Ethylene oxide]
- A61L2/20H . . . [N: Hydrogen peroxide] [N1004]
- A61L2/22 . . Phase substances, e.g. smokes, aerosols [N: or sprayed or atomised substances] [C1004]
- A61L2/23 . . Solid substances, e.g. granules, powders, blocks, tablets [N0001]
- A61L2/232 . . . layered or coated [N0001]
- A61L2/235 . . . cellular, porous or foamed [N0001]
- A61L2/238 . . . Metals or alloys, e.g. oligodynamic metals [N0001]

- A61L2/24 . Apparatus using programmed or automatic operation [C9409]

- A61L2/26 . Accessories [N: or devices or components used for biocidal treatment] [N1004]
- A61L2/28 . . Devices for testing the effectiveness or completeness of sterilisation, e.g. indicators which change colour ([apparatus involving enzymes or micro-organisms C12M1/34](#);

methods involving enzymes or micro-organisms [C12Q1/00](#) [N0001]

A61L9/00

Disinfection, sterilisation or deodorisation of air (body deodorants [A61Q15/00](#); purifying air by respirators [A62B](#), [A62D9/00](#); separating dispersed particles from gases or vapours [B01D45/00](#) to [B01D51/00](#), [B03C3/00](#); chemical or biological purification of waste gases [B01D53/34](#); production of ozone [C01B13/10](#); air-conditioning systems incorporating sterilisation [F24F3/16](#)) [C0909]

- A61L9/01 . Deodorant compositions [N: (compositions released by contact with a liquid [A61L9/05](#))] [C0012]
- A61L9/012 . . characterised by being in a special form, e.g. gels, emulsions [N: ([A61L9/04G](#) takes precedence)] [N0001] [C0203]
- A61L9/013 . . containing animal or plant extracts, or vegetable material [N0001]
- A61L9/014 . . containing sorbent material, e.g. activated carbon [N0001]
- A61L9/015 . using gaseous or vaporous substances, e.g. ozone ([A61L9/20](#) takes precedence; [N: evaporation in general [B01B1/00B](#)])[C0311]
- A61L9/02 . . using substances evaporated in the air by heating or combustion
- A61L9/03 . . . Apparatus therefor
- A61L9/03F [N: comprising a fan]
- A61L9/03M [N: emanating multiple odours] [N1004]
- A61L9/03W [N: comprising a wick] [N1004]
- A61L9/04 . . using substances evaporated in the air without heating
- A61L9/04B . . . [N: with the help of a macromolecular compound as a carrier or diluent ([A61L9/04G](#) takes precedence)]
- A61L9/04C . . . [N: with the help of an organic compound other than a macromolecular compound]
- A61L9/04D . . . [N: with the help of a non-organic compound]
- A61L9/04G . . . [N: air treating gels]
- A61L9/05 . . . specially adapted to be released by contact with a liquid, e.g. for toilets [N0001]
- A61L9/12 . . . Apparatus, e.g. holders, therefor
- A61L9/12F [N: comprising a fan]
- A61L9/12M [N: emanating multiple odours] [N1004]
- A61L9/12W [N: comprising a wick] [N1004]
- A61L9/14 . using sprayed or atomised substances [N: including air-liquid contact processes] [C1004]
- A61L9/14L . . [N: air-liquid contact processes, e.g. scrubbing] [N1004]
- A61L9/16 . using physical phenomena
- A61L9/18 . . Radiation ([A61L9/22](#) takes precedence)
- A61L9/20 . . . Ultra-violet radiation
- A61L9/20P [N: using a photocatalyst or photosensitiser] [N1004]
- A61L9/22 . . Ionisation

A61L11/00

Methods specially adapted for refuse [N: (desintegrating medical waste [B02C19/12M](#); disposal of medical waste [B09B3/00M](#))] [C9507]

A61L12/00 **Methods or apparatus for disinfecting or sterilising contact lenses; Accessories therefor [N9812]**

- A61L12/02 . using physical phenomena, e.g. electricity, ultrasonics or ultrafiltration [N9812]
- A61L12/02E . . [N: Electrolysis] [N9812]
- A61L12/02F . . [N: Ultrasounds] [N9812]
- A61L12/04 . . Heat ([A61L12/06](#) takes precedence) [N9812]
- A61L12/06 . . Radiation, e.g. ultraviolet or microwaves [N9812]
- A61L12/06B . . . [N: Ultraviolet radiation] [N9812]
- A61L12/06D . . . [N: Microwaves] [N9812]

- A61L12/08 . using chemical substances [N9812]
- A61L12/08B . . [N: in combination with specific enzymes] [N9812]
- A61L12/08D . . [N: in a gaseous state] [N9812]
- A61L12/08F . . [N: Container, accessories or devices therefor] [N9812]
- A61L12/08H . . [N: Heavy metals] [N9812]
- A61L12/10 . . Halogens or compounds thereof [N9812]
- A61L12/10B . . . [N: Chlorine dioxide (ClO₂)] [N9812]
- A61L12/10D . . . [N: Iodine, iodides or iodophores] [N9812]
- A61L12/10F . . . [N: Hypohalites; Active halogens] [N9812]
- A61L12/12 . . Non-macromolecular oxygen-containing compounds, e.g. hydrogen peroxide or ozone ([A61L12/10](#) takes precedence) [N9812][C0308]
- A61L12/12B . . . [N: Ozone] [N9812]
- A61L12/12D . . . [N: Hydrogen peroxide; Peroxy compounds] [N9812]
- A61L12/12D2 [N: neutralised with catalase or peroxidase] [N9812]
- A61L12/12D4 [N: neutralised with catalysts] [N9812]
- A61L12/14 . . Organic compounds not covered by groups [A61L12/10](#) or [A61L12/12](#) [N9812]
- A61L12/14B . . . [N: Biguanides, e.g. chlorhexidine] [N9812]
- A61L12/14B2 [N: Polymeric biguanides] [N9812]
- A61L12/14D . . . [N: Quaternary ammonium compounds] [N9812]
- A61L12/14D2 [N: Polymeric quaternary ammonium compounds] [N9812]
- A61L12/14F . . . [N: Aldehydes] [N9812]
- A61L12/14H . . . [N: Alcohols or derivatives thereof (**aldehydes** [A61L12/14F](#))] [N9812]
- A61L12/14K . . . [N: Mercury containing compounds, e.g. thimerosal] [N9812]

Guide heading: **Chemical aspects of, or use of materials for, bandages, dressings or absorbent pads** [N: comprising a solid support or backing] (for liquid bandages [A61L26/00](#); radioactive dressings [N: [A61N5/12](#)] [N: transdermal delivery devices [A61K9/70E](#)]) [N0001]

A61L15/00 **Chemical aspects of, or use of materials for, bandages, dressings or absorbent pads** (for liquid bandages [A61L26/00](#); radioactive dressings [N: [A61N5/12](#)]) [C0308]

Notes

1. In each set of groups [A61L15/08](#) to [A61L15/12](#) and [A61L15/18](#) to [A61L15/40](#), in the absence of an indication to the contrary, classification is made in the last appropriate place.
2. When classifying in groups [A61L15/08](#) to [A61L15/12](#), classification is also made in group 15/14 if the use of materials characterised by their function or physical properties is of interest.
3. When classifying in groups [A61L15/18](#) to [A61L15/40](#), classification is also made in groups [A61L15/42](#) to [A61L15/64](#) if the use of materials characterised by their function or physical properties is of interest.

[A61L15/07](#)

- . Stiffening bandages [[C9409](#)]

[A61L15/08](#)

- . . containing inorganic materials, e.g. plaster of Paris [[N9409](#)]

[A61L15/10](#)

- . . containing organic materials [[N9409](#)]

[A61L15/12](#)

- . . containing macromolecular materials [[N9409](#)]

[N: **Note**

[[C9807](#)]In group [A61L15/12](#) and subgroups, the use of specific polymers is indicated using the relevant combination set symbol, adding, after the [A61L15/12](#) symbol, the correspondent symbol of the polymer composition in subclass C08L, e.g. stiffening bandage based on polyurethane [A61L15/12,C08L75/04](#)
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[A61L15/12M](#)

- . . . [[N: Mixtures of macromolecular compounds](#)] [[N9411](#)]

[A61L15/14](#)

- . . Use of materials characterised by their function or physical properties [[N9409](#)]

[A61L15/16](#)

- . Bandages, dressings or absorbent pads for physiological fluids such as urine or blood, e.g. sanitary towels, tampons [[N9409](#)]

[A61L15/18](#)

- . . containing inorganic materials [[N9409](#)]

[A61L15/20](#)

- . . containing organic materials [[N9409](#)]

[A61L15/22](#)

- . . containing macromolecular materials [[N9409](#)]

[N: **Note**

In groups [A61L15/22](#) to [A61L15/30](#), the use of specific polymers is indicated using the relevant combination set symbol, adding, after the symbol in A61L, the correspondent symbol of the polymer in subclass C08L, e.g. absorbent pad containing starch [A61L15/22,C08L3/02](#)
]

[A61L15/22M](#)

- . . . [[N: Mixtures of macromolecular compounds](#)] [[N9411](#)]

[A61L15/24](#)

- . . . Macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds; Derivatives thereof [N: ([A61L15/22M takes precedence](#))] [[N9409](#)] [[C0003](#)]

[A61L15/26](#)

- . . . Macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds; Derivatives thereof [N: ([A61L15/22M takes precedence](#))] [[N9409](#)] [[C0003](#)]

[A61L15/28](#)

- . . . Polysaccharides or their derivatives [N: ([A61L15/22M takes precedence](#))] [[N9409](#)] [[C0003](#)]

[A61L15/30](#)

- . . . Rubbers or their derivatives [N: ([A61L15/22M takes precedence](#))] [[N9409](#)] [[C0003](#)]

- A61L15/32 . . . Proteins, polypeptides; Degradation products or derivatives thereof, e.g. albumin, collagen, fibrin, gelatin [N: ([A61L15/22M](#) takes precedence)] [N9409] [C0003]
- A61L15/32A [N: Collagen] [N9409]
- A61L15/34 . . . Oils, fats, waxes or natural resins [N: ([A61L15/22M](#) takes precedence)] [N9409] [C0003]
- A61L15/36 . . containing micro-organisms [N9409]
- A61L15/38 . . containing enzymes [N9409]
- A61L15/40 . . containing ingredients of undetermined constitution or reaction products thereof, [N: e.g. plant or animal extracts][N9409][C0308]
- A61L15/42 . . Use of materials characterised by their function or physical properties (liquid bandages [A61L26/00](#)) [N9409]
- A61L15/42E . . . [N: Porous materials, e.g. foams or sponges] [N9409][C0308]
- A61L15/44 . . . Medicaments [N9409]
- A61L15/46 . . . Deodorants or malodour counteractants, e.g. to inhibit the formation of ammonia or bacteria [N9409]
- A61L15/48 . . . Surfactants [N9409]
- A61L15/50 . . . Lubricants; Anti-adhesive agents [N9409]
- A61L15/52 . . . Water-repellants [N9409]
- A61L15/54 . . . Radio-opaque materials [N9409]
- A61L15/56 . . . Wetness-indicators or colourants [N9409]
- A61L15/58 . . . Adhesives [N9409]
- A61L15/58M [N: Mixtures of macromolecular compounds] [N9411]
- A61L15/60 . . . Liquid-swellable gel-forming materials, e.g. super-absorbents [N9409]
- A61L15/62 . . . [N: Compostable,] hydrosoluble or hydrodegradable materials [N9409] [C0005]
- A61L15/64 . . . specially adapted to be resorbable inside the body [N9409]

A61L17/00 **Materials for surgical sutures or for ligaturing blood vessels** (surgical adhesives [A61L24/00](#); surgical instruments, devices or methods for suturing or ligaturing [A61B17/04](#), [A61B17/12](#); supports or packages for suture materials [A61B17/04](#)); [N: Materials for prostheses or catheters (bone cements or surgical adhesives for soft body tissues [A61L24/00](#); shape or structure of prostheses [A61F2/00](#); shape or structure of catheters [A61M5/00](#))] [C0003]

Notes

1. In groups [A61L17/04](#) to [A61L17/14C](#), in the absence of an indication to the contrary, classification is made in the last appropriate place.
2. When classifying in group [A61L17/00](#), classification is also made in [A61L33/00](#) if the materials used are antithrombogenic.

- A61L17/00C . [N: containing a biologically active substance, e.g. a medicament or a biocide]
- A61L17/04 . Non-resorbable materials [N0001]
- A61L17/06 . At least partially resorbable materials [N0001]
- A61L17/08 . . of animal origin, e.g. catgut, collagen [N0001]

- A61L17/10 . . . containing macromolecular materials [N0001]
- A61L17/10B . . . [N: Polyesters not covered by [A61L17/12](#)] [N0001]
- A61L17/12 . . . Homopolymers or copolymers of glycolic acid or lactic acid [N0001]
- A61L17/14 . Post-treatment to improve physical properties [N0001]
- A61L17/14C . . [N: Coating] [N0001]

A61L24/00 Surgical adhesives or cements; Adhesives for colostomy devices [N0003]

[N: Note

[C0803]

In groups [A61L24/00](#) to [A61L24/12](#), the use of specific polymers is indicated using the relevant combination set symbol, adding, after the symbol in A61L, the correspondent symbol of the polymer in subclass C08L, e.g. surgical adhesives based on polymethylmethacrylate: [A61L24/06,C08L33/12](#)
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Notes

1. In groups [A61L24/02](#) to [A61L24/12](#), in the absence of an indication to the contrary, classification is made in the last appropriate place.
2. When classifying in group [A61L24/00](#), classification is also made in [A61L33/00](#) if the materials used are antithrombogenic.

- A61L24/00F . [N: Ingredients of undetermined constitution or reaction products thereof] [N0003]
- A61L24/00H . [N: Use of materials characterised by their function or physical properties] [N0003]
- A61L24/00H2 . . [N: Medicaments; Biocides] [N0003]
- A61L24/00H4 . . [N: Plasticisers] [N0003]
- A61L24/00H6 . . [N: Sprayable compositions] [N0003]
- A61L24/00H7 . . [N: Hydrogels or hydrocolloids] [N0003]
- A61L24/00H8 . . [N: Porous materials, e.g. foams or sponges] [N0003][C0308]
- A61L24/00H9 . . [N: Materials resorbable by the body] [N0003]
- A61L24/00R . [N: Composite materials, i.e. containing one material dispersed in a matrix of the same or different material] [N0003][C0308]
- A61L24/00R2 . . [N: with an inorganic matrix] [N0003]
- A61L24/00R2A . . . [N: Carbon] [N0003]
- A61L24/00R2E . . . [N: Phosphorus containing materials, e.g. apatite] [N0003]
- A61L24/00R2K . . . [N: Inorganic materials not covered by groups [A61L24/00R2A](#) or [A61L24/00R2E](#)] [N0003]
- A61L24/00R4 . . [N: with a macromolecular matrix] [N0003]
- A61L24/00R4A . . . [N: containing fillers of carbon] [N0003]
- A61L24/00R4E . . . [N: containing fillers of phosphorus-containing inorganic compounds, e.g. apatite] [N0003]
- A61L24/00R4K . . . [N: containing inorganic fillers not covered by groups [A61L24/00R4A](#) or [A61L24/00R4E](#)] [N0003]
- A61L24/00R4R . . . [N: containing macromolecular fillers] [N0003]

- A61L24/02 . containing inorganic materials [N0003]
- A61L24/04 . containing macromolecular materials [N0003]
- A61L24/04M . . [N: Mixtures of macromolecular materials] [N0003]
- A61L24/04R . . [N: obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds ([A61L24/04M](#) takes precedence)] [N0003]
- A61L24/06 . . obtained by reactions only involving carbon-to-carbon unsaturated bonds [N: ([A61L24/04M](#), [A61L24/04R](#) take precedence)] [N0312]
- A61L24/08 . . Polysaccharides [N: ([A61L24/04M](#) takes precedence)] [N0003]
- A61L24/10 . . Polypeptides; Proteins [N: ([A61L24/04M](#) takes precedence)] [N0003]
- A61L24/10A . . . [N: Collagen] [N0003]
- A61L24/10E . . . [N: Gelatin] [N0003]
- A61L24/10F . . . [N: Fibrin; Fibrinogen] [N0003][C0308]
- A61L24/10R . . . [N: Specific proteins or polypeptides not covered by groups [A61L24/10A](#) to [A61L24/10F](#)] [N0003][C0308]
- A61L24/12 . . Ionomer cements, e.g. glass-ionomer cements [N: ([A61L24/04M](#) takes precedence)] [N0003]

- A61L26/00** **Chemical aspects of, or use of materials for, [N: wound dressings or] bandages [N: in liquid, gel or powder form] [N0003][C0308]**

- Note**
When classifying in group [A61L26/00](#), classification is also made in [A61L33/00](#) if the materials used are antithrombogenic.

- [N: **Note**
In groups [A61L26/00](#) to [A61L26/00R](#), the use of specific polymers is indicated using the relevant combination set symbol, adding, after the symbol in A61L, the correspondent symbol of the polymer in subclass C08L, e.g. liquid bandages on alginates: [A61L26/00B5,C08L5/04](#)
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- A61L26/00A . [N: containing inorganic materials] [N0003]
- A61L26/00B . [N: containing macromolecular materials] [N0003]
- A61L26/00B2 . . [N: obtained by reactions only involving carbon-to-carbon unsaturated bonds] [N0003]
- A61L26/00B4 . . [N: obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds] [N0003]
- A61L26/00B5 . . [N: Polysaccharides] [N0003]
- A61L26/00B6 . . [N: Polypeptides; Proteins; Degradation products thereof] [N0003]
- A61L26/00B6A . . . [N: Collagen] [N0003]
- A61L26/00B6E . . . [N: Gelatin] [N0003]
- A61L26/00B6F . . . [N: Fibrin; Fibrinogen] [N0003][C0308]
- A61L26/00B6R . . . [N: Specific proteins or polypeptides not covered by groups [A61L26/00B6A](#) to [A61L26/00B6F](#)] [N0003][C0308]
- A61L26/00B8 . . [N: Mixtures of macromolecular compounds] [N0003]
- A61L26/00F . [N: Ingredients of undetermined constitution or reaction products thereof] [N0003]

- A61L26/00H . [N: Use of materials characterised by their function or physical properties] [N0003]
- A61L26/00H2 . . [N: Medicaments; Biocides] [N0003]
- A61L26/00H4 . . [N: Plasticisers] [N0003]
- A61L26/00H6 . . [N: Sprayable compositions] [N0003]
- A61L26/00H7 . . [N: Hydrogels or hydrocolloids] [N0003]
- A61L26/00H8 . . [N: Porous materials, e.g. foams or sponges] [N0003][C0308]
- A61L26/00H9 . . [N: Materials resorbable by the body] [N0003][C0308]

- A61L26/00R . [N: Composite materials, i.e. containing one material dispersed in a matrix of the same or different material] [N0003][C0308]

A61L27/00

Materials for [N: grafts or] prostheses or for coating [N: grafts or] prostheses (dental prostheses [A61C13/00](#); shape or structure of prostheses [A61F2/00](#); use of preparations for artificial teeth [A61K6/02](#); artificial kidneys [A61M1/14](#))[C0304]

Notes

1. In groups [A61L27/02](#) to [A61L27/48](#), in the absence of an indication to the contrary, classification is made in the last appropriate place
2. When classifying in groups [A61L27/02](#) to [A61L27/48](#), classification is also made in groups [A61L27/50](#) to [A61L27/60](#) if the use of materials characterised by their function or physical properties is of interest
3. When classifying in group [A61L27/00](#), classification is also made in [A61L33/00](#) if the materials used are antithrombogenic

[N: Note

In group [A61L27/00](#), the use of specific polymers is indicated using the relevant classification symbols of subclass C08L in the second position of the combination set, e.g. prosthesis based on polyvinylchloride [A61L27/16,C08L27/06](#)
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- A61L27/02 . Inorganic materials [N0001]
- A61L27/02B . . [N: Other specific inorganic materials not covered by [A61L27/04](#) to [A61L27/12](#)] [N0001]
- A61L27/04 . . Metals or alloys [N0001]
- A61L27/04A . . . [N: Iron or iron alloys] [N0001]
- A61L27/04F . . . [N: Cobalt or cobalt alloys] [N0001]
- A61L27/04R . . . [N: Other specific metals or alloys not covered by [A61L27/04A](#) to [A61L27/04F](#) or [A61L27/06](#)] [N0001]
- A61L27/06 . . . Titanium or titanium alloys [N0001]
- A61L27/08 . . Carbon; [N: Graphite] [N0001]
- A61L27/10 . . Ceramics or glasses [N0001]
- A61L27/10A . . . [N: containing Al₂O₃] [N0001]
- A61L27/12 . . Phosphorus-containing materials, e.g. apatite [N0001]

- A61L27/14 . Macromolecular materials [N0001]
- A61L27/16 . . obtained by reactions only involving carbon-to-carbon unsaturated bonds [N0001]

- A61L27/16B . . . [N: Rubbers] [N0001]
- A61L27/18 . . obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds [N0001]
- A61L27/20 . . Polysaccharides [N0001]
- A61L27/22 . . Polypeptides or derivatives thereof, [N: e.g. degradation products] [N0001]
- A61L27/22E . . . [N: Gelatin] [N0001]
- A61L27/22F . . . [N: Fibrin; Fibrinogen] [N0001][C0308]
- A61L27/22R . . . [N: Other specific proteins or polypeptides not covered by [A61L27/22E](#), [A61L27/22F](#) or [A61L27/24](#)] [N0001]
- A61L27/24 . . . Collagen [N0001]
- A61L27/26 . . Mixtures of macromolecular compounds [N0001]

- A61L27/28 . Materials for coating prostheses [N0001]
- A61L27/30 . . Inorganic materials [N0001]
- A61L27/30A . . . [N: Carbon] [N0001]
- A61L27/30R . . . [N: Other specific inorganic materials not covered by [A61L27/30A](#) to [A61L27/32](#)] [N0001]
- A61L27/32 . . . Phosphorus-containing materials, e.g. apatite [N0001]
- A61L27/34 . . Macromolecular materials [N0001]

- A61L27/36 . containing ingredients of undetermined constitution or reaction products thereof, [N: e.g. transplant tissue, natural bone, extracellular matrix (isolated natural compounds, e.g. collagen [A61L27/24](#))] [N0001] [C1204]
- A61L27/36B . . [N: characterised by the human or animal origin of the biological material, e.g. hair, fascia, fish scales, silk, shellac, pericardium, pleura, renal tissue, amniotic membrane, parenchymal tissue, fetal tissue, muscle tissue, fat tissue, enamel] [N1104]
- A61L27/36B2 . . . [N: Bone, e.g. demineralised bone matrix [DBM], bone powder] [N1104]
- A61L27/36B4 . . . [N: Cartilage, synovial fluid] [N1104]
- A61L27/36B6 . . . [N: Blood, e.g. platelet-rich plasma] [N1104]
- A61L27/36B8 . . . [N: Skin, e.g. dermal papillae] [N1104]
- A61L27/36B10 . . . [N: Vascular tissue, e.g. heart valves] [N1104]
- A61L27/36B12 . . . [N: Intestinal tissue, e.g. small intestinal submucosa] [N1104]
- A61L27/36B14 . . . [N: Extracellular matrix (ECM)] [N1104]
- A61L27/36D . . [N: characterised by the origin of the biological material other than human or animal, e.g. plant extracts, algae] [N1104]
- A61L27/36F . . [N: characterised by the site of application in the body (materials for artificial blood vessels [A61L27/50E](#); materials for use in artificial skin [A61L27/60](#))] [N1104]
- A61L27/36F2 . . . [N: Connective tissue] [N1104]
- A61L27/36F2B [N: Bones] [N1104]
- A61L27/36F2D [N: Cartilage, e.g. meniscus] [N1104]
- A61L27/36F2D2 [N: Intervertebral discs (mechanical aspects and structures of intervertebral discs [A61F2/44D](#))] [N1104] [C1204]
- A61L27/36F2F [N: Ligaments, tendons] [N1104]
- A61L27/36F4 . . . [N: Epithelial tissues other than skin] [N1104]
- A61L27/36F6 . . . [N: Muscle tissue, e.g. sphincter] [N1104]

- A61L27/36F8 . . . [N: Nerve tissue, e.g. brain, spinal cord, nerves, dura mater] [N1104]
- A61L27/36F10 . . . [N: Hollow organs, e.g. bladder, esophagus, urether, uterus, intestine] [N1104]
- A61L27/36H . . [N: subjected to a specific treatment prior to implantation, e.g. decellularising, demineralising, grinding, cellular disruption/non-collagenous protein removal, anti-calcification, crosslinking, supercritical fluid extraction, enzyme treatment] [N1104]
- A61L27/36H2 . . . [N: characterised by the use of chemical agents in the treatment, e.g. specific enzymes, detergents, capping agents, crosslinkers, anticalcification agents] [N1104]
- A61L27/36H4 . . . [N: characterised by physical conditions of the treatment, e.g. applying a compressive force to the composition, pressure cycles, ultrasonic/sonication or microwave treatment, lyophilisation] [N1104]
- A61L27/36H6 . . . [N: characterised by the function or physical properties of the final product, where no specific conditions are defined to achieve this ([A61L27/36H2](#), [A61L27/36H4](#) take precedence)] [N1104]
- A61L27/38 . . [N: containing added animal cells (**organs or tissue containing native cells** [A61L27/36](#))] [N0001][C1104]
- A61L27/38B . . . [N: characterised by specific cells or progenitors thereof, e.g. fibroblasts, connective tissue cells, kidney cells] [N1104]
- A61L27/38B2 [N: Endothelial cells] [N1104]
- A61L27/38B4 [N: Epithelial cells, e.g. keratinocytes, urothelial cells] [N1104]
- A61L27/38B6 [N: Cartilage-forming cells, e.g. pre-chondrocytes] [N1104]
- A61L27/38B8 [N: Bone-forming cells, e.g. osteoblasts, osteocytes, osteoprogenitor cells] [N1104]
- A61L27/38B10 [N: Muscle cells, e.g. smooth muscle cells] [N1104]
- A61L27/38B12 [N: Nerve cells, e.g. dendritic cells, Schwann cells] [N1104]
- A61L27/38B14 [N: Cells able to produce different cell types, e.g. hematopoietic stem cells, mesenchymal stem cells, marrow stromal cells, embryonic stem cells] [N1104]
- A61L27/38D . . . [N: characterised by the site of application in the body (**materials for artificial blood vessels** [A61L27/50E](#); **materials for use in artificial skin** [A61L27/60](#))] [N1104]
- A61L27/38D2 [N: Connective tissue] [N1104]
- A61L27/38D2B [N: Bones] [N1104]
- A61L27/38D2D [N: Cartilage, e.g. meniscus] [N1104]
- A61L27/38D2D2 [N: Intervertebral discs (**mechanical aspects and structures of intervertebral discs** [A61F2/44D](#))] [N1104] [C1204]
- A61L27/38D2F [N: Ligaments, tendons] [N1104]
- A61L27/38D2H [N: Dental/periodontal tissues] [N1104]
- A61L27/38D4 [N: Epithelial tissues other than skin] [N1104]
- A61L27/38D6 [N: Muscle tissue, e.g. sphincter] [N1104]
- A61L27/38D8 [N: Nerve tissue, brain, spinal cord, nerves, dura mater] [N1104]
- A61L27/38D10 [N: Hollow organs, e.g. bladder, esophagus, urether, uterus] [N1104]
- A61L27/38F . . . [N: comprising two or more cell types] [N1104]
- A61L27/38F2 [N: as distinct cell layers] [N1104]
- A61L27/38H . . . [N: using specific culture conditions, e.g. stimulating differentiation of stem cells, pulsatile flow conditions] [N1104]
- A61L27/40 . . Composite materials, i.e. containing one material dispersed in a matrix of the same or

- different material [N0001][C0304]
- A61L27/42 . . . having an inorganic matrix [N0001]
- A61L27/42A [N: of carbon] [N0001]
- A61L27/42E [N: of phosphorus containing material, e.g. apatite] [N0001]
- A61L27/42R [N: of other specific inorganic materials not covered by [A61L27/42A](#) or [A61L27/42E](#)] [N0001]
- A61L27/44 . . . having a macromolecular matrix [N0001]
- A61L27/44A [N: with carbon fillers] [N0001]
- A61L27/44R [N: with other specific inorganic fillers other than those covered by [A61L27/44A](#) or [A61L27/46](#)] [N0001] [C0210]
- A61L27/46 with phosphorus-containing inorganic fillers [N0001]
- A61L27/48 with macromolecular fillers [N0001]
- A61L27/50 . . . Materials characterised by their function or physical properties, [N: e.g. injectable or lubricating compositions, shape-memory materials, surface modified materials] [N0001][C0304]
- A61L27/50B . . . [N: Plasticizers] [N0001]
- A61L27/50D . . . [N: Stabilizers] [N0001]
- A61L27/50E . . . [N: for artificial blood vessels (apparatus for applying cells on a blood vessel prosthesis [A61F2/06B](#))] [N0001]
- A61L27/52 . . . Hydrogels or hydrocolloids [N0001]
- A61L27/54 . . . Biologically active materials, e.g. therapeutic substances ([N: [A61L27/22R](#) takes precedence]) [N0001]
- A61L27/56 . . . Porous materials, [N: e.g. foams or sponges] [N0001][C0308]
- A61L27/58 . . . Materials at least partially resorbable by the body [N0001]
- A61L27/60 . . . Materials for use in artificial skin [N0001]

A61L28/00 **Materials for colostomy devices** (adhesives for colostomy devices [A61L24/00](#)) [N0003]

Note

When classifying in group [A61L28/00](#), classification is also made in [A61L33/00](#) if the materials used are antithrombogenic.

- A61L28/00A . . . [N: containing inorganic materials] [N0003]
- A61L28/00B . . . [N: containing macromolecular materials] [N0003]
- A61L28/00B2 [N: obtained by reactions only involving carbon-to-carbon unsaturated bonds] [N0003]
- A61L28/00B4 [N: obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds] [N0003]
- A61L28/00B5 [N: Polysaccharides] [N0003]
- A61L28/00B6 [N: Polypeptides; Proteins; Degradation products thereof] [N0003]
- A61L28/00B8 [N: Mixtures of macromolecular compounds] [N0003]
- A61L28/00F . . . [N: Ingredients of undetermined constitution or reaction products thereof] [N0003]
- A61L28/00H . . . [N: Use of materials characterised by their function or physical properties] [N0003]

- A61L28/00H2 . . [N: Medicaments; Biocides] [N0003]
- A61L28/00H4 . . [N: Plasticisers] [N0003]
- A61L28/00H6 . . [N: Sprayable compositions] [N0003]
- A61L28/00H7 . . [N: Hydrogels or hydrocolloids] [N0003]
- A61L28/00H8 . . [N: Porous materials, e.g. foams or sponges] [N0003][C0308]
- A61L28/00H9 . . [N: Materials resorbable by the body] [N0003]

- A61L28/00K . [N: Materials for coating] [N0003]
- A61L28/00K2 . . [N: Inorganic materials] [N0003]
- A61L28/00K4 . . [N: Macromolecular materials] [N0003]

- A61L28/00R . [N: Composite materials, i.e. containing one material dispersed in a matrix of the same or different material] [N0003][C0308]
- A61L28/00R2 . . [N: with an inorganic matrix] [N0003]
- A61L28/00R4 . . [N: with a macromolecular matrix] [N0003]
- A61L28/00R4A . . . [N: containing fillers of carbon] [N0003]
- A61L28/00R4E . . . [N: containing fillers of phosphorus-containing inorganic compounds] [N0003]
- A61L28/00R4K . . . [N: containing inorganic fillers not covered by groups [A61L28/00R4A](#) or [A61L28/00R4E](#)] [N0003]
- A61L28/00R4R . . . [N: containing macromolecular fillers] [N0003]

A61L29/00 **Materials for catheters, [N: medical tubing, cannulae, or endoscopes] or for coating catheters (shape or structure of catheters [A61M25/00](#)) [C0801]**

Notes

1. In groups [A61L29/02](#) to [N: [A61L29/12D](#)], in the absence of an indication to the contrary, classification is made in the last appropriate place
2. When classifying in groups [A61L29/02](#) to [N: [A61L29/12D](#)], classification is also made in groups [A61L29/14](#) to [A61L29/18](#) if the use of materials characterised by their function or physical properties is of interest
3. When classifying in group [A61L29/00](#), classification is also made in [A61L33/00](#) if the materials used are antithrombogenic

[N: **Note**[C0803]

In group [A61L29/00](#), the use of specific polymers is indicated using the relevant classification symbols of subclass C08L in the combination set, e.g. a catheter based on polyvinylchloride [A61L29/04B,C08L27/06](#)
]

- A61L29/00F . [N: Ingredients of undetermined constitution or reaction products thereof]

- A61L29/02 . Inorganic materials [N0001]

- A61L29/04 . Macromolecular materials [N0001]
- A61L29/04B . . [N: obtained by reactions only involving carbon-to-carbon unsaturated bonds] [N0001]
- A61L29/04B2 . . . [N: Rubbers] [N0001]

- A61L29/04D . . [N: Polysaccharides] [N0001]
- A61L29/04F . . [N: Proteins; Polypeptides; Degradation products thereof] [N0001]
- A61L29/04F2 . . . [N: Collagen] [N0001]
- A61L29/04F4 . . . [N: Gelatin] [N0001]
- A61L29/04F6 . . . [N: Fibrin; Fibrinogen] [N0001][C0308]
- A61L29/04F10 . . . [N: Other specific proteins or polypeptides not covered by [A61L29/04F2](#) to [A61L29/04F6](#)] [N0001]
- A61L29/04M . . [N: Mixtures of macromolecular compounds] [N0001]
- A61L29/06 . . obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds[N0001]

- A61L29/08 . Materials for coatings [N0001]
- A61L29/08B . . [N: Macromolecular materials] [N0001]
- A61L29/10 . . Inorganic materials [N0001]
- A61L29/10A . . . [N: Carbon] [N0001]
- A61L29/10R . . . [N: Inorganic materials other than carbon] [N0001]

- A61L29/12 . Composite materials, i.e. containing one material dispersed in a matrix of the same or different material [N0001][C0304]
- A61L29/12B . . [N: having an inorganic matrix] [N0001]
- A61L29/12D . . [N: having a macromolecular matrix] [N0001]

- A61L29/14 . Materials characterised by their function or physical properties, [N: e.g. lubricating compositions] [N0001][C0304]
- A61L29/14B . . [N: Plasticizers] [N0001]
- A61L29/14D . . [N: Stabilizers] [N0001]
- A61L29/14F . . [N: Hydrogels or hydrocolloids] [N0001]
- A61L29/14H . . [N: Porous materials, e.g. foams or sponges] [N0001][C0308]
- A61L29/14K . . [N: Materials at least partially resorbable by the body] [N0001]
- A61L29/16 . . Biologically active materials, e.g. therapeutic substances ([N: [A61L29/04F10](#) takes precedence]) [N0001][C0304]
- A61L29/18 . . Materials at least partially X-ray or laser opaque [N0001]

A61L31/00

Materials for other surgical articles, [N: e.g. stents, stent-grafts, shunts, surgical drapes, guide wires, materials for adhesion prevention, occluding devices, surgical gloves, tissue fixation devices (shape or structure of stent-grafts [A61F2/07](#), of stents [A61F2/82](#), of surgical gloves [A61B19/04](#), of surgical drapes [A61B19/08](#), of occluding devices [A61B17/12P](#))] [C1204]

Notes

1. In groups [A61L31/02](#) to [N: [A61L31/12D10](#)], in the absence of an indication to the contrary, classification is made in the last appropriate place
2. When classifying in groups [A61L31/02](#) to [N: [A61L31/12D10](#)], classification is also made in groups [A61L31/14](#) to [A61L31/18](#) if the use of materials characterised by their function or physical properties is of interest
3. When classifying in group [A61L31/00](#), classification is also made in [A61L33/00](#) if the

materials used are antithrombogenic

[N: **Note**[C0803]

In group [A61L31/00](#), the use of specific polymers is indicated using the relevant classification symbols of subclass C08L in the second position of the combination set, e.g. surgical clamp based on polyvinylchloride [A61L31/04H,C08L27/06](#)]

- A61L31/00F . [N: Ingredients of undetermined constitution or reaction products thereof]

- A61L31/02 . Inorganic materials [N0001]
- A61L31/02B . . [N: Metals or alloys] [N0001]
- A61L31/02D . . [N: Carbon; Graphite] [N0001]
- A61L31/02F . . [N: Ceramic or ceramic-like structures, e.g. glasses] [N0001]
- A61L31/02R . . [N: Other inorganic materials not covered by [A61L31/02B](#) to [A61L31/02F](#)] [N0001]

- A61L31/04 . Macromolecular materials [N0001]
- A61L31/04B . . [N: Mixtures of macromolecular compounds] [N0001]
- A61L31/04D . . [N: Polysaccharides] [N0001]
- A61L31/04F . . [N: Proteins; Polypeptides; Degradation products thereof] [N0001]
- A61L31/04F2 . . . [N: Collagen] [N0001]
- A61L31/04F4 . . . [N: Gelatin] [N0001]
- A61L31/04F6 . . . [N: Fibrin; Fibrinogen] [N0001][C0308]
- A61L31/04F10 . . . [N: Other specific proteins or polypeptides not covered by [A61L31/04F2](#) to [A61L31/04F6](#)] [N0001]
- A61L31/04H . . [N: obtained by reactions only involving carbon-to-carbon unsaturated bonds ([A61L31/04B](#) takes precedence)] [N0001]
- A61L31/04H3 . . . [N: Rubbers] [N0001]
- A61L31/06 . . obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds [N: ([A61L31/04B](#) takes precedence)] [N0001]

- A61L31/08 . Materials for coatings [N0001]
- A61L31/08B . . [N: Inorganic materials] [N0001]
- A61L31/08B2 . . . [N: Carbon; Graphite] [N0001]
- A61L31/08B4 . . . [N: Phosphorus-containing materials, e.g. apatite] [N0001]
- A61L31/08B6 . . . [N: Other specific inorganic materials not covered by [A61L31/08B2](#) or [A61L31/08B4](#)] [N0001]
- A61L31/10 . . Macromolecular material [N0001]

- A61L31/12 . Composite materials, i.e. containing one material dispersed in a matrix of the same or different material [N0001][C0304]
- A61L31/12B . . [N: having an inorganic matrix] [N0001]
- A61L31/12B2 . . . [N: of carbon] [N0001]
- A61L31/12B4 . . . [N: of phosphorus-containing materials , e.g. apatite] [N0001]

- A61L31/12B6 . . . [N: of other specific inorganic materials not covered by [A61L31/12B2](#) or [A61L31/12B4](#)] [N0001]
- A61L31/12D . . . [N: having a macromolecular matrix] [N0001]
- A61L31/12D2 . . . [N: containing carbon fillers] [N0001]
- A61L31/12D4 . . . [N: containing fillers of phosphorus-containing inorganic materials] [N0001]
- A61L31/12D6 . . . [N: containing other specific inorganic fillers not covered by [A61L31/12D2](#) or [A61L31/12D4](#)] [N0001]
- A61L31/12D10 . . . [N: containing macromolecular fillers] [N0001]
- A61L31/14 . . . Materials characterised by their function or physical properties, [N: e.g. injectable or lubricating compositions, shape-memory materials, surface modified materials] [N0001][C0304]
- A61L31/14B . . . [N: Plasticizers] [N0001]
- A61L31/14D . . . [N: Stabilizers] [N0001]
- A61L31/14F . . . [N: Hydrogels or hydrocolloids] [N0001]
- A61L31/14H . . . [N: Porous materials, e.g. foams or sponges] [N0001][C0308]
- A61L31/14K . . . [N: Materials at least partially resorbable by the body] [N0001]
- A61L31/16 . . . Biologically active materials, e.g. therapeutic substances [N: [A61L31/04F10](#) takes precedence] [N0001][C0304]
- A61L31/18 . . . Materials at least partially X-ray or laser opaque [N0001]

A61L33/00

Antithrombogenic treatment of surgical articles, e.g. sutures, catheters, prostheses, or of articles for the manipulation or conditioning of blood; Materials for such treatment [C0001]

[N: Notes

1. In groups [A61L33/00R](#) to [A61L33/00T](#) and [A61L33/02](#) to [A61L33/12A](#), in the absence of an indication to the contrary, classification is made in the last appropriate place
2. When classifying in groups [A61L33/02](#) to [A61L33/12A](#), classification is also made in group [A61L33/00H](#) if of interest
3. In group [A61L33/00](#), the use of specific polymers is indicated using the relevant classification symbols of subclass C08L in the second position of the combination set, e.g. antithrombogenic treatment with the help of polyvinylchloride [A61L33/06B](#), [C08L27/06](#)

]

- A61L33/00H . . . [N: Use of materials characterised by their function or physical properties]
- A61L33/00H2 . . . [N: Anticoagulant, e.g. heparin, platelet aggregation inhibitor, fibrinolytic agent, other than enzymes, attached to the substrate]
- A61L33/00H2A [N: using a surface active agent]
- A61L33/00H2E [N: using a quaternized group or a protonated amine group of the substrate]
- A61L33/00H2F [N: using an intermediate layer of polymer]
- A61L33/00H2K [N: using a polymer with positively charged atoms in the polymeric backbone, e.g. ionenes]
- A61L33/00H2T [N: characterised by the choice of an antithrombotic agent other than heparin (heparinoid [A61L33/08](#); polypeptides [A61L33/12](#))]

- A61L33/00H3 . . [N: Enzymes, e.g. urokinase, streptokinase]
- A61L33/00H4 . . [N: Plasticizers]
- A61L33/00H5 . . [N: Stabilizers]
- A61L33/00H7 . . [N: Hydrogels or hydrocolloids]
- A61L33/00H8 . . [N: Porous materials, e.g. foams or sponges][C0308]

- A61L33/00R . [N: Chemical modification of the substrate]
- A61L33/00R2 . . [N: by reacting with an organic compound other than heparin]
- A61L33/00R4 . . [N: by grafting of a monomer onto the substrate]

- A61L33/00T . [N: Physical treatment, e.g. plasma treatment][C0308]

- A61L33/02 . Use of inorganic materials [N0001]
- A61L33/02B . . [N: Metal or alloys] [N0001]
- A61L33/02D . . [N: Carbon; Graphite] [N0001]
- A61L33/02R . . [N: Other specific inorganic materials not covered by [A61L33/02B](#) or [A61L33/02D](#)]

- A61L33/04 . Use of organic materials, e.g. acetylsalicylic acid [N0001]

- A61L33/06 . Use of macromolecular materials ([grafting of a monomer onto the substrate A61L33/00R4](#)) [N0001]
- A61L33/06A . . [N: Mixtures of macromolecular compounds] [N0001]
- A61L33/06B . . [N: obtained by reactions only involving carbon-to-carbon unsaturated bonds ([A61L33/06A takes precedence](#))] [N0001]
- A61L33/06B2 . . . [N: Rubbers] [N0001]
- A61L33/06D . . [N: obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds ([A61L33/06A takes precedence](#))] [N0001]
- A61L33/08 . . Polysaccharides [N0001]
- A61L33/12 . . Polypeptides, proteins or derivatives thereof, [N: e.g. degradation products thereof] [N0001]
- A61L33/12A . . . [N: Collagen] [N0001]
- A61L33/12E . . . [N: Gelatin] [N0001]
- A61L33/12F . . . [N: Fibrin] [N0001]
- A61L33/12R . . . [N: Other specific proteins or polypeptides not covered by [A61L33/12A](#) to [A61L33/12F](#)] [N0001]

- A61L33/18 . Use of ingredients of undetermined constitution or reaction products thereof [N0009]