#### **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 agents employed A01N; preserving, e.g. sterilising, food or foodstuffs A23; preparations for medical, dental or toiletry purposes A61K)

#### **Definition statement**

This place covers:

Apparatus or methods specifically adapted for use in treating air either:

- by destroying noxious microorganisms within the air;
- · by removing microorganisms from the air;
- · by otherwise rendering air aseptic;
- · by removing unwanted odour constituents from air; or
- by covering up unwanted odour constituents or potential constituents by adding scent to air.

Apparatus or methods of general applicability for use in destroying noxious microorganisms on or otherwise rendering completely aseptic articles or materials, e.g. destroying bacteria or fungus.

Apparatus or methods that are not covered as a whole in another subclass and are specially adapted for use in destroying noxious microorganisms on or otherwise rendering completely aseptic specific articles, e.g. contact lenses or specific materials, e.g. refuse.

Materials that are specially adapted for devices that are to be affixed to, placed on, placed within or cover either:

- portions of the surfaces of human bodies having sores, e.g. blisters, boils or wounds, e.g. cuts, abrasions, for extended periods of time, i.e. at least several minutes, but frequently for days, during their healing process to absorb fluids from, protect or medicate them, e.g. poultices;
- naturally occurring cavities of or passageways within human bodies to absorb bodily discharges or other fluids from bodies, e.g. urine, protect or medicate them, e.g. sanitary towels, tampons; or
- incisions or openings in human bodies formed during surgery.

Chemical compounds or compositions that are used in conjunction with, or compose a portion of, the above type of specially adaptive devices or their materials and increase their effectiveness by:

- enhancing their ability to heal or treat sores, wounds, surgical incisions or surgical openings;
- changing in some manner the absorbability of the devices or materials; or
- otherwise influencing their operation, e.g. prolongs useful life, of the devices or materials.

Materials specially adapted to be used in devices that:

- join together the edges of wounds, surgical incisions or surgical openings, e.g. sutures; or
- form a tissue mass by compressively encircling the mass and holding it, e.g. ligatures.

Adhesives specially adapted for surgical uses.

Materials specially adapted for forming devices used as substitutes for a part of the body that is missing or non-functional or materials specially adapted for coating these devices, e.g. skin grafts.

Materials specially adapted to be used in:

· surgical construction of artificial excretory openings from colons; or

Definition statement

• devices that travel up colons to inspect, clean or treat them.

Materials specially adapted for use within the structure of hollow flexible tubes that are intended to be:

- inserted into human bodies to put in or take out fluids, e.g. cannulae, catheters;
- · used to open up or close blood vessels, passageways or body cavities; or
- passed inside of blood vessels, passageways, or body cavities for diagnostic or treatment purposes, e.g. endoscopes.

Materials specially adapted to be used for other surgical uses or devices, e.g. stents, materials for adhesion prevention.

Materials specially adapted for use as antithrombogenic treatments for at least one of the above type of devices or materials or the chemical compounds or compositions that form, or compose a portion of, these antithrombogenic treatments.

Specially adapted components or steps for at least one of the above types of apparatus, methods, or devices.

Auxiliary appliances or accessories specially adapted for use with at least one of the above types of apparatus or devices, e.g. devices for testing effectiveness of sterilisation.

#### References

## Limiting references

This place does not cover:

Preservation of bodies or disinfecting characterised by the agent employed	<u>A01N</u>
Preparations for medical, dental or toiletry purposes	<u>A61K</u>

#### 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:

Sterilising food or foodstuffs	<u>A23</u>
Preservation of milk or milk preparations	A23B 11/10
Devices specifically adapted for cleaning or disinfection shavers or razors	A45D 27/46
Apparatus or methods for destroying solid waste or transforming solid waste using sterilization into something useful or harmless	B09B 3/00
Pasteurisation, sterilisation, preservation, purification, clarification, or ageing of alcoholic beverages	C12H 1/00
Devices for adding disinfecting agents to lavatories	E03D 9/02
Air conditioning systems or room units, including air purification or sterilisation means	F24F 3/16, F24F 8/20
Sanitary or hygienic devices for transducer mouthpieces or earpieces	H04R 1/12

#### Informative references

Surgical instruments	A61B 17/00
Operating gloves	A61B 42/10

Surgical drapes	A61B 46/00
Dental prosthetics	A61C 9/00
Shape or structure of prostheses	A61F 2/00
Devices providing patency to, or preventing collapsing of, tubular structures of the body, e.g. stents	A61F 2/82
Bandages, dressings, or absorbent pads	A61F 13/00
Tracheal tubes	A61M 16/04
Catheters	A61M 25/00
Tubes or valves specially adapted for medical use	A61M 39/00
Processes for making harmful chemical substances harmless, or less harmful, by effecting a chemical change in the substance	A62D 3/00
Sterilisation of packages or package contents in association with packaging	<u>B65B 55/00</u>
Preparation of ozone	C01B 13/10

# Special rules of classification

## **Multiple classification**

Looping references between group <u>A61L</u> and group <u>A61K</u> have been identified. CPC will be updated/corrected once this inconsistency is resolved in IPC. The current classification practice in CPC is as follows: Both <u>A61L</u> and <u>A61K</u> will be considered limiting reference.

# Sets of groups wherein Last-place rule is applied

Within each one of the following sets of groups, at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place:

Groups <u>A61L 15/08-A61L 15/12</u>

Groups <u>A61L 15/18</u>-<u>A61L 15/40</u>

Groups <u>A61L 17/04-A61L 17/14</u>

Groups A61L 24/02-A61L 24/04

Groups <u>A61L 27/02</u>-<u>A61L 27/40</u>

Groups <u>A61L 29/02-A61L 29/12</u>

Groups <u>A61L 31/02-A61L 31/12</u>

Groups <u>A61L 33/02</u>-<u>A61L 33/18</u>

# Secondary classification based on use of materials characterised by particular function or physical properties when of interest

When the inventive thing is classified based upon its chemical composition within one of the sets of groups  $\underline{A61L}$   $\underline{15/08}$ - $\underline{A61L}$   $\underline{15/12}$ ,  $\underline{A61L}$   $\underline{15/18}$ - $\underline{A61L}$   $\underline{15/40}$ ,  $\underline{A61L}$   $\underline{27/02}$  -  $\underline{A61L}$   $\underline{27/40}$ ,  $\underline{A61L}$   $\underline{29/02}$  -  $\underline{A61L}$   $\underline{29/12}$  or  $\underline{A61L}$   $\underline{31/02}$  -  $\underline{A61L}$   $\underline{31/12}$ , classification of this subject matter is also made to cover its function or physical properties for each set of groups into their corresponding group, (i.e. respectively group  $\underline{A61L}$   $\underline{15/14}$ ,  $\underline{A61L}$   $\underline{15/42}$ ,  $\underline{A61L}$   $\underline{29/14}$  or  $\underline{A61L}$   $\underline{31/14}$ ) when this aspect is of interest.

#### Secondary classification based on use of materials with antithrombogenic properties

When the inventive thing is fully provided for and classified within groups <u>A61L 17/00</u>, <u>A61L 24/00</u>, <u>A61L 28/00</u>, <u>A61L 29/00</u> and <u>A61L 31/00</u> classification should also be made within group <u>A61L 33/00</u> if a material used is antithrombogenic in nature.

#### **Use of Indexing symbols**

When classifying in groups  $\underline{A61L\ 2/00}$  -  $\underline{A61L\ 12/00}$ , it is desirable to add the Indexing symbols of group  $\underline{A61L\ 2101/00}$ , relating to the chemical composition of materials used in disinfecting, sterilising or deodorising.

## **Glossary of terms**

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

_	substance, composition or material that prevents or reduces coagulation, clotting, depositing or precipitation of blood, plasma
	protein or a component of blood (e.g. anticoagulant)

## A61L 2/00

Methods or apparatus for disinfecting or sterilising materials or objects other than foodstuffs or contact lenses; Accessories therefor (for contact lenses A61L 12/00; atomisers for disinfecting agents A61M; sterilisation of packages or package contents in association with packaging B65B 55/00; treatment of water, waste water, sewage or sludge C02F; disinfecting paper D21H 21/36; disinfecting devices for water closets E03D; articles having provision for disinfection, see the relevant subclasses for these articles, e.g. H04R 1/12)

## **Definition statement**

This place covers:

Processes and devices used for biocidal treatment of entities other than foodstuffs or contact lenses

## References

# Limiting references

This place does not cover:

Biocides, e.g. as disinfectants, as pesticides, as herbicides	<u>A01N</u>
Sterilising, e.g. of complete packages	B65B 55/02
Sterilising, aseptic filling and closing	B67C 7/0073

## 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:

Sterilising food or foodstuffs	<u>A23</u>
Preservation of foods or foodstuffs, in general, e.g. pasteurising, sterilising, specially adapted for foods or foodstuffs	A23B 2/00
Preservation of milk or milk preparations	A23B 11/10
Devices specifically adapted for cleaning or disinfection shavers or razors	A45D 27/46

Apparatus or methods for destroying solid waste or transforming solid waste using sterilization into something useful or harmless	B09B 3/00
Pasteurisation, sterilisation, preservation, purification, clarification, or ageing of alcoholic beverages	C12H 1/00
Devices for adding disinfecting agents to lavatories	E03D 9/02
Air conditioning systems including air purification or sterilisation means	F24F 3/16, F24F 8/20
Sanitary or hygienic devices for transducer mouthpieces or earpieces	H04R 1/12

#### Informative references

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

Sterilisation of air	A61L 9/00
Methods especially adapted for refuse	A61L 11/00
Cleaning devices specially adapted for dental instruments	A61C 19/002
Treatment of blood	A61M 1/02
Processes for making harmful chemical substances harmless or less harmful	A62D 3/00
Cleaning in general	B08B
Preparation of ozone	C01B 13/00
Treatment of water, waste water, or sewage	C02F 1/00
Sanitary doorknobs or handles, e.g. comprising a disinfectant	E05B 1/0069

# **Special rules of classification**

The substance which has a biocidal action is classified according to its state, liquid,, gaseous or solid. E.g. hydrogen peroxide may be used in liquid or gaseous form, it's then classified in group  $\underline{A61L\ 2/186}$  or  $\underline{A61L\ 2/208}$ .

# A61L 2/0017

# {Filtration}

## **Definition statement**

This place covers:

Treatment of pharmaceuticals, biologicals or living parts for removing or inactivating microorganism, i.e. disinfection or sterilisation, by filtration.

#### References

#### Informative references

Devices for carrying-off, for treatment of, or for carrying-over, body-liquids	A61M 1/00
(e.g. dialysis)	

# {Filtration}

#### **Definition statement**

This place covers:

Methods or apparatus for disinfecting or sterilising materials or objects other than foodstuffs, contact lenses, pharmaceuticals, biological or living parts by filtration

# References

# Limiting references

This place does not cover:

Filtering material for liquid or gaseous fluid	B01D 39/00
Filters and filtering processes for gases	B01D 46/00

# A61L 2/035

# {Electrolysis}

# **Definition statement**

This place covers:

Direct and indirect sterilisation by electrolysis, irrespective of the location of biocidal action in or downstream the electrolysis cell.

## A61L 2/07

#### **Steam**

# **References**

#### Limiting references

This place does not cover:

Pressure vessels, e.g. autoclaves, as such without its application in	B01J 3/04
biocidal treatment	

# A61L 2/18

# Liquid substances {or solutions comprising solids or dissolved gases}

#### References

#### Informative references

Cleaning devices specially adapted for surgical instruments	A61B 90/70
Cleaning devices specially adapted for dental instruments without its application in sterilisation or disinfection	A61C 19/002

# {Ozone dissolved in a liquid}

#### References

#### Informative references

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

Production of ozone without its application in sterilisation or disinfection	C01B 13/10
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# A61L 2/186

# {Peroxide solutions}

## References

## Informative references

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

Production of peroxides without its application in sterilisation or	C01B 15/00
disinfection	

# A61L 2/202

# {Ozone}

#### References

#### Informative references

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

Production of ozone without its application in sterilisation or disinfection	C01B 13/10
Electrolytic production of ozone	C25B 1/13

# A61L 2/206

# {Ethylene oxide}

## References

#### Informative references

Preparation of ethylene oxide	C07D 301/00
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# {Hydrogen peroxide}

## References

#### Informative references

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

Production of Peroxides; Peroxyhydrates; Peroxyacids or salts thereof;	C01B 15/00
Superoxides; Ozonide as such without application in sterilisation or	
disinfection	

# A61L 2/22

# Phase substances, e.g. smokes, aerosols (or sprayed or atomised substances)

#### **Definition statement**

This place covers:

Biocidal treatment using e.g. sprayed substances.

#### References

## Informative references

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

Spraying or atomising liquids as such without application in sterilisation or	B05B 17/00
disinfection	

# A61L 2/26

# Accessories (or devices or components used for biocidal treatment)

## **Definition statement**

This place covers:

Devices, which are used in methods or apparatuses for disinfection or sterilisation.

#### References

#### Informative references

Instrument-protective drapes	A61B 46/10
Protective casings or covers for appliances or instruments, e.g. boxes or sterile covers; Instrument tables or cupboards	A61B 50/00

Devices for testing the effectiveness or completeness of sterilisation, e.g. indicators which change colour (apparatus involving enzymes or microorganisms C12M 1/34; methods involving enzymes or microorganisms C12Q 1/00)

#### **Definition statement**

This place covers:

Devices to indicate that sterilisation is complete or effective

#### References

#### Informative references

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

Measuring or testing with condition measuring or sensing means for enzymology or microbiology	C12M 1/34
Testing for sterility conditions involving viable microorganisms	C12Q 1/02

## A61L 9/00

Disinfection, sterilisation or deodorisation of air (body deodorants A61Q 15/00; purifying air by respirators A62B, A62D 9/00; separating dispersed particles from gases or vapours B01D 45/00 - B01D 51/00, B03C 3/00; chemical or biological purification of waste gases B01D 53/34; production of ozone C01B 13/10; air-conditioning systems incorporating sterilisation F24F 3/16, F24F 8/20)

# **Definition statement**

This place covers:

Methods and devices for biocidal or deodorising treatment of air.

#### References

#### Limiting references

This place does not cover:

Automobile: Adding substances other than water to the air, e.g. perfume	B60H 3/0007
Devices for eliminating smells by diffusing deodorants in lavatories	E03D 9/007
Air-conditioning systems with purification, e.g. by filtering; by sterilisation; by ozonisation	F24F 3/16, F24F 8/20
Air-humidification	F24F 6/00

#### Informative references

Poisoning or narcotising insects by vaporising an insecticide	A01M 1/2022
Body deodorants	A61Q 15/00

Breathing masks or helmets	A62B 18/00
Filters for gases	B01D 46/00
Chemical or biological purification of waste gases, Separation of gases	B01D 53/00
Separating dispersed particles from gases or vapour, e.g. air, byelectrostatic effect	B03C 3/00
Spraying or atomising liquids	B05B 17/00
Preparation of ozone	C01B 13/10

# A61L 9/01

# Deodorant compositions {(compositions released by contact with a liquid A61L 9/05)}

#### **Definition statement**

This place covers:

Chemical compounds and compositions for use in deodorising air by covering or binding malodorous substances.

#### References

#### Informative references

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

Cosmetic or similar toiletry preparations	A61K 8/00
Formulations or additives for perfume preparations	A61Q 13/00
Perfumes, essential oils	C11B 9/00

## Special rules of classification

The groups A61L 9/01-A61L 9/015 are only given to documents, which relate to counter-acting malodorous substances in the air.

## A61L 9/012

characterised by being in a special form, e.g. gels, emulsions {(A61L 9/048 takes precedence)}

#### **Definition statement**

This place covers:

Deodorant composition characterised by specific physical form, e.g. gels, emulsions

# A61L 9/014

## containing sorbent material, e.g. activated carbon

#### **Definition statement**

This place covers:

Deodorant composition containing sorbent material, e.g. carbon

# References

#### Informative references

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

Separation of gases by adsorption	B01D 53/02
Solid sorbent compositions	B01J 20/00

## A61L 9/015

using gaseous or vaporous substances, e.g. ozone (A61L 9/20 takes precedence {; evaporation in general B01B 1/005})

# **Definition statement**

This place covers:

Both chemical deactivating / covering malodorous substances, and disinfecting / sterilising by the use of gaseous counteragents, e.g. perfumes, gaseous hydrogen peroxide, ozone.

#### References

#### Informative references

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

Production of ozone without	C01B 13/10

# A61L 9/03

# **Apparatus therefor**

# **Definition statement**

This place covers:

Apparatus for disinfection, sterilisation of air using substances evaporated in the air by heating or combustion

#### References

#### Informative references

Stationary means for catching or killing insects by vaporising an insecticide using a heat source	A01M 1/2061
Evaporation or evaporation apparatus	B01B 1/005

# A61L 9/032

# {comprising a fan}

## References

#### Informative references

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

Stationary means for catching or killing insects by vaporising an	A01M 1/2072
insecticide using a heat source combined with a fan	

# A61L 9/037

# {comprising a wick}

#### References

#### Informative references

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

Holders or dispensers for liquid insecticide without heating, e.g. using	A01M 1/2044
wicks	

# A61L 9/04

# using substances evaporated in the air without heating

## References

#### Informative references

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

Poisoning or narcotising insects by vaporising an insecticide without	A01M 1/2027
heating	

## A61L 9/05

# specially adapted to be released by contact with a liquid, e.g. for toilets

#### **Definition statement**

This place covers:

Disinfection, sterilisation of air using substances evaporated in the air without heating specially adapted to be released contact with a liquid

# References

## Limiting references

This place does not cover:

Water-closets or urinals with flushing devices for eliminating smells by	E03D 9/007
diffusing deodorants in lavatories	

## A61L 9/12

# Apparatus, e.g. holders, therefor

## **Definition statement**

This place covers:

Apparatus for disinfection, sterilisation of air using substances evaporated in the air without heating

#### References

#### Informative references

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

Stationary means for catching or killing insects by vaporising an	A01M 1/2027
insecticide without heating	

# A61L 9/122

# {comprising a fan}

#### References

#### Informative references

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

Stationary means for catching or killing insects by vaporising an	A01M 1/2033
insecticide without heating combined with a fan	

# A61L 9/127

# {comprising a wick}

## References

# Informative references

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

Holders or dispensers for liquid insecticide without heating, e.g. using	A01M 1/2044
wicks	

# A61L 9/14

# using sprayed or atomised substances (including air-liquid contact processes)

#### **Definition statement**

This place covers:

Disinfection, sterilisation of air processes using sprayed or atomised substances

## References

#### Informative references

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

Apparatus for spraying or atomising liquids as such without application in	B05B 17/00
air treatment	

# A61L 9/145

# {air-liquid contact processes, e.g. scrubbing}

#### **Definition statement**

This place covers:

Disinfection, sterilisation of air processes with air-liquid contact

#### References

# Informative references

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

Separation of gases or vapours by absorption other than air	B01D 53/14
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# **Glossary of terms**

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

Dispersal air scrubbing device	Wet scrubber is used to clean air by contacting air with a scrubbing	
	solution, e.g. water, solution of reagents	

# A61L 9/16

# using physical phenomena

#### **Definition statement**

This place covers:

Disinfection, sterilisation of air processes using physical phenomena other than the ones of the subgroups.

#### References

## Limiting references

This place does not cover:

Air-conditioning systems characterised by filtering of air	<u>F24F 8/10</u>	
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## A61L 9/18

# Radiation (A61L 9/22 takes precedence)

#### References

## Limiting references

This place does not cover:

Air-conditioning systems characterised by purification

F24F 3/16, F24F 8/20

# A61L 9/20

#### Ultraviolet radiation

#### References

#### Informative references

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

Processes employing the direct application of ultraviolet light

B01J 19/123

# A61L 9/205

# {using a photocatalyst or photosensitiser}

#### **Definition statement**

This place covers:

Disinfection, sterilisation of air processes by ultraviolet radiation using a photocatalyst or photosensitiser

#### References

#### Informative references

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

Catalysts characterised by their photocatalytic properties

B01J 35/39

# A61L 11/00

Methods specially adapted for refuse {(disintegrating medical waste B02C 19/0075; disposal of medical waste B09B 3/00)}

#### **Definition statement**

This place covers:

Methods and apparatuses for sterilisation or disinfection of refuse, e.g. from medical facilities, food industry.

#### References

#### Limiting references

This place does not cover:

Disintegrating garbage, waste or sewage without biocidal treatment	B02C 18/0084
Disintegrating medical waste without biocidal treatment	B09B 3/00
Destroying or transforming of medical waste without biocidal treatment	B09B 3/0075

# A61L 12/00

# Methods or apparatus for disinfecting or sterilising contact lenses; Accessories therefor

# **Definition statement**

This place covers:

Devices and processes for the biocidal treatment of contact lenses of different types.

#### References

#### Limiting references

This place does not cover:

The lenses per se, the composition for cleaning, storing, disinfecting contact lenses.

Methods and apparatus for sterilisation or disinfection in general	A61L 2/00
Disinfectants	<u>A01N</u>
Medicinal preparations for the eye, e.g. artificial tears	A61K 9/0048
Compositions for cleaning contact lenses	C11D 3/0078

#### Informative references

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

Methods and apparatus for sterilisation or disinfection in general	A61L 2/00
Production of contact lenses	B29D 11/00038
Optical elements, i.e. contact lenses	G02B 1/043
Contact lenses for the eye	G02C 7/04

# A61L 15/00

Chemical aspects of, or use of materials for, bandages, dressings or absorbent pads (for liquid bandages A61L 26/00; radioactive dressings (A61N 5/1029))

#### **Definition statement**

This place covers:

Chemical composition of materials used, or use of such materials, for stiffening bandages such as splints and orthopaedic casts for long-term immobilizing broken or deformed body parts (A61L 15/07 - A61L 15/14).

Chemical composition of materials used, or use of such materials, for articles intended to be in contact with the human skin and absorb physiological fluids such as blood, urine and faeces. This includes wound dressings and bandages adapted to be attached to the injured parts of the body, and articles worn by the patient for reception of urine, faeces, catamenial or other discharge such as sanitary napkins, tampons and diapers (A61L 15/16 - A61L 15/64).

This group covers wound dressings and bandages having a solid part or backing.

# Relationships with other classification places

Polymers are classified in CO8L.

Non-chemical aspects of absorbent pads, bandages or dressings are classified in A61F 13/00.

Adhesives in general are classified in C09J.

Polymer foams and post-treatment of polymers are classified in C08J 9/00.

Laminates, layered materials are classified in **B32B**.

Peptides are classified in C07K.

Cosmetic preparations are classified in A61K 8/00.

Preparations for care of the skin are classified in A61Q 19/00.

#### References

## Limiting references

This place does not cover:

Surgical foams or sponges to stop bleeding (haemostatic sponges/foams)	A61L 24/00
Surgical adhesives and adhesives for colostomy devices	A61L 24/00
Wound dressings or bandages in liquid, gel or powder form (not having a backing)	A61L 26/00
Materials for colostomy devices	A61L 28/00
Non-chemical aspects of orthopaedic devices, e.g. splints or casts	A61F 5/01
Non-chemical aspects of Plaster of Paris bandages and other stiffening bandages in general	A61F 13/04
Cosmetic wipes	A61K 8/0208
Transdermal patches	A61K 9/7023
Radioactive dressings	A61N 5/1029

#### Informative references

Artificial skin	A61L 27/60
Apparatus or processes for manufacturing non-adhesive dressings or bandages	A61F 13/00987
Non-chemical aspects of adhesive bandages or dressings	A61F 13/02
Apparatus or processes for manufacturing adhesive dressings or bandages	A61F 13/0276
Properties of absorbent articles, e.g. stiffness or absorbency.	A61F 13/15203

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Soluble or disintegrable in liquid	A61F 13/15211
Compostable or biodegradable	A61F 13/15252
Absorbent articles with wetness indicator or alarm	A61F 13/42
Absorbent articles with radio-opaque material or signalling means for residual material.	A61F 13/44
Additives, e.g. for odour, disinfectant or pH control.	A61F 13/8405
Adhesives for stabilising dentures	A61K 6/35
Cosmetic preparations containing materials of undetermined constitution.	A61K 8/96
Medicinal preparations characterised by the use of oils, fats or waxes as non-active ingredients.	A61K 47/44
Medicinal preparations characterised by the use of ingredients of undetermined constitution as non-active ingredients.	A61K 47/46
Calcium sulfate cements, e.g. Plaster of Paris, gypsum	C04B 11/00
Crosslinking of polymers	C08J 3/24
Differential crosslinking of one polymer with one crosslinking type, e.g. surface crosslinking.	C08J 3/245
Compositions of macromolecular compounds being water soluble or water swellable, e.g. aqueous gels	C08L 101/14
Pressure-sensitive adhesives	C09J 7/38
Lubricating compositions	<u>C10M</u>

# Special rules of classification

When classifying in groups  $\underline{A61L\ 15/08}$  -  $\underline{A61L\ 15/12}$ , classification is also made in group  $\underline{A61L\ 15/14}$  if the use of materials characterised by their function or physical properties is of interest.

When classifying in groups A61L 15/18 - A61L 15/40, classification is also made in groups A61L 15/42 - A61L 15/64 if the use of materials characterised by their function or physical properties is of interest.

In group <u>A61L 15/12</u> and subgroups, the use of specific polymers is indicated using the relevant classification symbols of subclass <u>C08L</u> preceded by a "comma", e.g. stiffening bandage based on polyurethane <u>A61L 15/12</u>, <u>C08L 75/04</u>.

In groups  $\underline{A61L\ 15/22}$  -  $\underline{A61L\ 15/30}$  the use of specific polymers is indicated using the relevant classification symbols of subclass  $\underline{C08L}$  preceded by a "comma", e.g. absorbent pad containing starch  $\underline{A61L\ 15/22}$ ,  $\underline{C08L\ 3/02}$ .

Mixtures of macromolecular compounds are only classified in <u>A61L 15/225</u> and not in each individual subgroups <u>A61L 15/24</u>, <u>A61L 15/26</u>, <u>A61L 15/28</u>, <u>A61L 15/30</u>, <u>A61L 15/32</u>, <u>A61L 15/34</u>.

Each of the polymeric components of the mixture is classified in its correspondent <u>C08L</u> group, e.g. a wound dressing comprising a mixture of polyacrylate and polylactide <u>A61L 15/225</u>, <u>C08L 33/04</u> and <u>A61L 15/225</u>, <u>C08L 67/04</u>.

In group <u>A61L 15/58</u> and subgroups, the use of specific polymers as adhesives is indicated using the relevant classification symbols of subclass <u>C08L</u> preceded by a "comma",, e.g. adhesive bandage based on polyurethane <u>A61L 15/58</u>, <u>C08L 75/04</u>.

In group <u>A61L 15/60</u>, the use of specific polymers is indicated using the relevant classification symbols of subclass <u>C08L</u> preceded by a "comma", e.g. absorbent pad comprising superabsorbent particles of polyacrylates <u>A61L 15/60</u>, <u>C08L 33/04</u>.

Special rules of classification

When using combination classes for specifying the macromolecular materials the following rules apply:

Compositions of polysaccharides are combined with <u>C08L 1/00</u> - <u>C08L 5/16</u>.

Compositions of rubber are combined with CO8L 7/00 - CO8L 21/02.

Compositions of macromolecular compounds obtained by reactions involving only carbon-to-carbon unsaturated bonds are combined with C08L 23/00 - C08L 57/12.

Compositions of macromolecular compounds obtained otherwise than by reactions involving only carbon-to-carbon unsaturated bonds are combined with C08L 59/00 - C08L 87/00.

Compositions of natural macromolecular compounds or of derivatives thereof are combined with C08L 89/00 - C08L 89/06.

The use of liquid or gel materials which may or may not contain a solid support are classified in both groups A61L 15/00 and A61L 26/00.

Gelatin and Collagen are classified in A61L 15/325.

Wetting agents are classified in A61L 15/48.

Absorbent products containing enzymes are classified in A61L 15/38 and not in A61L 15/32.

Antimicrobial substances such as antibiotics are only classified in A61L 15/46.

Growth factors are classified in A61L 15/44 as medicaments and not in A61L 15/32.

For the concerned medicaments (A61L 15/44 and A61L 15/46) as additional information, a classification symbol in A61L 2300/00 is given.

A61L 15/40 covers ingredients of undetermined constitution or reaction products thereof such as products of natural origin (from plants or animals) and cells. This group will cover products such as natural silk derived from Bombyx mori, nacre, bees wax, honey, shellac, blood and blood.

A61L 15/34 covers oils, fats, waxes and natural resins including emollients, lotions, skin care compositions, lanolin, paraffin, petroleum jelly.

Additional information concerning materials characterized by their function or physical properties, materials and methods for coating medical devices and materials for tissue regeneration are also classified in A61L 2400/00-A61L 2430/40.

# **Glossary of terms**

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

Absorbent articles are considered to be articles adapted to absorb liquid excreted by the body	Wound dressings, diapers, sanitary towels, tampons, catamenial devices, panty liners, incontinence pads, training pants
SAP	Superabsorbent polymers/particles
PSA	Pressure sensitive adhesives
AUL	Absorbency under load
CRC	Centrifuge retention capacity
SFC	Saline flow conductivity
Gel blocking	Swelling of the external part of SAP obstructs the transmission of liquid into the particle

Glossary of terms

Non-woven	Fabric-like material made from long fibres, bonded together by
	chemical, mechanical, heat or solvent treatment. The term is used
	to denote fabrics, such as felt, which are neither woven nor knitted

## A61L 17/00

Materials for surgical sutures or for ligaturing blood vessels (surgical adhesives A61L 24/00; surgical instruments, devices or methods for suturing or ligaturing A61B 17/04, A61B 17/12; supports or packages for suture materials A61B 17/04); {Materials for prostheses or catheters (bone cements or surgical adhesives for soft body tissues A61L 24/00; shape or structure of prostheses A61F 2/00; shape or structure of catheters A61M 5/00)}

#### **Definition statement**

This place covers:

Materials for surgical sutures or for ligaturing blood vessels.

# Relationships with other classification places

Polymers are classified in CO8L.

Processes and apparatus for the production of yarns or threads are classified in D02G 3/00.

#### References

#### Informative references

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

Surgical instruments, devices or methods for suturing or ligaturing	A61B 17/04
Suture anchors, buttons or pledgets, i.e. means for attaching sutures to bone, cartilage or soft tissue	A61B 17/0401
Supports or packages for suture materials	A61B 17/06114
Non-chemical aspects of sutures	A61B 17/06166
Yarns or threads for use in medical applications	D02G 3/448
Yarns or threads with antibacterial properties	D02G 3/449

## Special rules of classification

When classifying in group  $\underline{A61L\ 17/00}$ , classification is also made in  $\underline{A61L\ 33/00}$  if the materials used are antithrombogenic.

For the concerned medicaments (A61L 17/005) as additional information, a classification symbol in A61L 2300/00 is given.

Additional information concerning materials characterized by their function or physical properties, materials and methods for coating medical devices and materials for tissue regeneration are also classified in A61L 2400/00-A61L 2430/40.

# **Glossary of terms**

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

Surgical suture	Medical device used to hold body tissues together after an injury or surgery
Yarn	Unitary assembly of fibres, usually produced by spinning
Thread	Assembly of yarns or filaments, usually produced by twisting
Braid (also called plait)	Complex structure or pattern formed by intertwining three or more strands of flexible material such as textile fibres.

# A61L 24/00

# Surgical adhesives or cements; Adhesives for colostomy devices

## **Definition statement**

This place covers:

Adhesives or sealants for surgical use and surgical cements to anchor prostheses.

Adhesives for colostomy devices.

Embolizing / Occluding compositions and haemostatic compositions (surgical sponges or foams to stop bleeding)

Bone wax to mechanically control bleeding from bone surfaces during surgical procedures.

Viscoelastic compositions/agents for use in surgery.

# Relationships with other classification places

Adhesives in general are classified in C09J.

Cements in general are classified in C04B

#### References

## Limiting references

This place does not cover:

Haemostatic wound dressings (with a backing)	A61L 15/00
Haemostatic dressings (with no backing) in liquid, gel or powder form	A61L 26/00
Bone fillers and bone pastes	A61L 27/00
Occluding devices, e.g. surgical coils	A61L 31/00

#### Informative references

Materials for colostomy devices	A61L 28/00
Surgical glue applicators	A61B 17/00491
Tools for preparing, introducing or removing bone cement or other fluid fillers into or from bones	A61B 17/8802
Preparation of bone cement, e.g. mixing	A61B 17/8833

Informative references

Dental adhesives or cements	A61K 6/30
Adhesives for stabilising dentures	A61K 6/35
Medicinal preparations for the eye	A61K 9/0048
Two-component delivery syringes	A61M 5/19

# Special rules of classification

When classifying in group A61L 24/00, classification is also made in A61L 33/00 if the materials used are antithrombogenic.

In groups <u>A61L 24/046</u> - <u>A61L 24/12</u>, the use of specific polymers is indicated by using the relevant classification symbols of subclass <u>C08L</u> preceded by a "comma", e.g. surgical adhesives based on polymethylmethacrylate: <u>A61L 24/06</u>, <u>C08L 33/12</u>.

In groups A61L 24/0047 - A61L 24/0094, the use of specific polymers is indicated by using the relevant classification symbols of subclass C08L preceded by a "comma", e.g. composite surgical adhesives with a matrix of polyhydroxy butyrate containing chitosan particles: A61L 24/0094, C08L 5/08 and A61L 24/0094, C08L 67/04.

When using combination classes for specifying the macromolecular materials the following rules apply:

Compositions of polysaccharides are combined with CO8L 1/00 - CO8L 5/16

Compositions of rubber are combined with <u>C08L 7/00</u> - <u>C08L 21/02</u>.

Compositions of macromolecular compounds obtained by reactions involving only carbon-to-carbon unsaturated bonds are combined with  $\frac{\text{C08L }23/00}{\text{C08L }57/12}$ .

Compositions of macromolecular compounds obtained otherwise than by reactions involving only carbon-to-carbon unsaturated bonds are combined with <u>C08L 59/00</u> - <u>C08L 87/00</u>.

Compositions of natural macromolecular compounds or of derivatives thereof are combined with C08L 89/00 - C08L 89/06.

Mixtures of macromolecular compounds are only classified in <u>A61L 24/043</u> and not in each individual subgroups <u>A61L 24/046</u>, <u>A61L 24/06</u>, <u>A61L 24/08</u>, <u>A61L 24/10</u>.

Each of the polymeric components of the mixture is classified in its correspondent <u>C08L</u> group, e.g. a surgical adhesive comprising a mixture of cyanoacrylate and polylactide <u>A61L 24/043</u>, <u>C08L 35/04</u> and <u>A61L 24/043</u>, <u>C08L 67/04</u>.

Growth factors are classified in A61L 24/0015 as medicaments.

For the concerned medicaments (A61L 24/0015) as additional information, a classification symbol in A61L 2300/00 is given.

Additional information concerning materials characterized by their function or physical properties, materials and methods for coating medical devices and materials for tissue regeneration are also classified in A61L 2400/00-A61L 2430/40.

A61L 24/0005 covers ingredients of undetermined constitution or reaction products thereof such as products of natural origin (from plants or animals) and cells. This group will cover products such as natural silk derived from Bombyx mori, nacre, bees wax, honey, shellac, blood and blood.

# **Glossary of terms**

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

Bone cements	Are used to anchor prostheses. The bone cement fills the free space between the prosthesis and the bone.
Bone wax	It is used to help mechanically control bleeding from bone surfaces during surgical procedures.
Embolizing compositions	Occluding compositions
Haemostatic compositions	Antihemorrhagic (antihaemorrhagic) compositions that promote haemostasis (stop bleeding).
Composite materials or composites	Materials made from two or more constituent materials with significantly different physical or chemical properties which remain separate and distinct at the macroscopic or microscopic scale within the finished structure.

# A61L 26/00

# Chemical aspects of, or use of materials for, {wound dressings or} bandages {in liquid, gel or powder form}

## **Definition statement**

This place covers:

Chemical composition of materials used, or use of such materials, for wound dressings or bandages in liquid, gel or powder form.

This group covers wound dressings and bandages not having a solid part or backing.

Sprayable compositions.

Wound covering materials such as foams, for external use.

# Relationships with other classification places

Polymers are classified in **C08L** 

#### References

#### Limiting references

This place does not cover:

Materials for wound dressings and bandages with a solid part or backing	A61L 15/00
Materials for surgical foams or sponges (haemostatic sponges/foams)	A61L 24/00
Drug-containing film-forming compositions (spray-on)	A61K 9/7015

# Informative references

Galenical aspects of topical compositions (ointments or creams) for skin	A61K 9/0014
Syringes	A61M 5/178

## Special rules of classification

When classifying in group  $\underline{A61L\ 26/00}$ , classification is also made in  $\underline{A61L\ 33/00}$  if the materials used are antithrombogenic.

In groups <u>A61L 26/0009</u> and subgroups and <u>A61L 26/0095</u>, the use of specific polymers is indicated by using the relevant classification symbols of subclass <u>C08L</u> preceded by a "comma", e.g. liquid bandages on alginates: <u>A61L 26/0023</u>, <u>C08L 5/04</u>.

When using combination classes for specifying the macromolecular materials the following rules apply:

Compositions of polysaccharides are combined with <u>C08L 1/00</u> - <u>C08L 5/16</u>.

Compositions of rubber are combined with C08L 7/00 - C08L 21/02.

Compositions of macromolecular compounds obtained by reactions involving only carbon-to-carbon unsaturated bonds are combined with <u>C08L 23/00</u> - <u>C08L 57/12</u>.

Compositions of macromolecular compounds obtained otherwise than by reactions involving only carbon-to-carbon unsaturated bonds are combined with C08L 59/00 - C08L 87/00.

Compositions of natural macromolecular compounds or of derivatives thereof are combined with C08L 89/00 - C08L 89/06.

Mixtures of macromolecular compounds are only classified in <u>A61L 26/0052</u> and not in each individual subgroups <u>A61L 26/0014</u> - <u>A61L 26/0047</u>.

Each of the polymeric components of the mixture is classified in its correspondent <u>C08L</u> group, e.g. a liquid bandage comprising a mixture of chitosan and polyethylene glycol <u>A61L 26/0052</u>, <u>C08L 5/08</u> and <u>A61L 26/0052</u>, <u>C08L 71/02</u>.

Compositions of block copolymers are classified in CO8L 53/00.

Growth factors are classified in A61L 26/0066 as medicaments.

A61L 26/0057 covers ingredients of undetermined constitution or reaction products thereof such as products of natural origin (from plants or animals) and cells. This group will cover products such as natural silk derived from Bombyx mori, nacre, bees wax, honey, shellac, blood and blood-derived products (e.g. plasma, Platelet Rich Plasma [PRP], platelet concentrate), tissue fragments, Extracellular matrix (ECM), Submucosa (e.g. SIS), Essential oils, algae, diatomaceous earth.

For the concerned medicaments ( $\underline{A61L\ 26/0066}$ ) as additional information, a classification symbol in  $\underline{A61L\ 2300/00}$  is given.

Additional information concerning materials characterized by their function or physical properties, materials and methods for coating medical devices and materials for tissue regeneration are also classified in A61L 2400/00-A61L 2430/40.

# A61L 27/00

Materials for {grafts or} prostheses or for coating {grafts or} prostheses (dental prostheses A61C 13/00; shape or structure of prostheses A61F 2/00; use of preparations for artificial teeth A61K 6/80; artificial kidneys A61M 1/14)

#### **Definition statement**

This place covers:

Chemical composition of materials used, or use of such materials, for prostheses or grafts or for coating prostheses or grafts.

**Definition statement** 

Artificial blood vessels, vascular patches, artificial valves, annuloplasty rings (A61L 27/507).

Materials for tissue engineering such as scaffolds.

Artificial skin, skin grafts (A61L 27/60)

Fillers for tissue regeneration and augmentation such as bone and soft tissue fillers, cosmetic fillers.

Injectable compositions, e.g. for regenerating cartilage.

Chemical aspects of surface treatment or modification of prostheses or grafts.

Spinal implants, e.g. spinal spacers, fusion cages, intervertebral discs.

Nerve implants, nerve conduits, nerve regeneration devices.

# Relationships with other classification places

Undifferentiated human, animal or plant cells, e.g. cell lines; Tissues; Cultivation or maintenance thereof; Culture media therefore are classified in <a href="C12N 5/00">C12N 5/00</a>.

Medicinal preparations containing material or reaction products thereof with undetermined constitution is classified in A61K 35/00.

Electrotherapy is classified in A61N 1/00.

Magnetotherapy is classified in A61N 2/00.

Radiation Therapy is classified in A61N 5/00.

Ultrasound Therapy is classified in A61N 7/00.

Preparations for dentistry are classified in A61K 6/00.

Dentistry: Dental implants, Fixation tools, Implanting tools are classified in A61C 8/00 and A61C 13/00.

Shape or structure of prostheses is classified in A61F.

## References

#### Limiting references

This place does not cover:

Non-chemical aspects of intraocular lenses (IOL)	A61F 2/16
Prostheses not implantable in the body, e.g. artificial limbs.	A61F 2/50
Artificial teeth	A61K 6/80
Ocular implants for drug delivery (e.g. ocular inserts)	A61K 9/0051
Artificial kidneys	A61M 1/14
Blood oxygenators	A61M 1/16
Bioreactors characterized by scaffolds or matrices serving as support for the cultured cells	C12M 25/14
Substrates for cell culture	C12N 5/0068
Vertebrate cells or tissues	C12N 5/0602
Contact lenses characterised by the material of which they are made.	G02B 1/043
Contact lenses in general	G02C 7/04

#### Informative references

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

Preservation of excised living parts of the human or animal body	A01N 1/10
Non-chemical aspects of cosmetic or alloplastic implants	A61F 2/0059
Special surfaces of prostheses, e.g. for improving ingrowth	A61F 2/0077
Artificial gland structures using bioreactors	A61F 2/022
Hollow or tubular parts of organs, e.g. bladders, trachea, bronchi, bile ducts	A61F 2/04
Non-chemical aspects of prostheses for blood vessels	A61F 2/06
Non-chemical of skin implants, e.g. artificial skin	A61F 2/105
Mammary prostheses	A61F 2/12
Eye prostheses (intraocular lenses, corneal implants)	A61F 2/14- A61F 2/1694
Non-chemical aspects of heart valves	A61F 2/24
Manufacturing methods of heart valves	A61F 2/2415
Non-chemical aspects of annuloplasty rings	A61F 2/2442
Non-chemical aspects of bone prostheses	A61F 2/28
Non-chemical aspects of joint prostheses	A61F 2/30
Non-chemical aspects of prostheses for intervertebral or spinal discs	A61F 2/442
Tools for introducing bone substitute, for implanting bone graft implants or for compacting them in the bone cavity	A61F 2/4601
Use of preparations for artificial teeth, for filling or for capping teeth	A61K 6/80
Artificial hearts	A61M 60/00
Shaped ceramic products made of calcium phosphates, e.g. hydroxyapatite	C04B 35/447
Chemical analysis of biological material, e.g. blood, urine	G01N 33/52
Coating for optical elements	G02B 1/10

## Special rules of classification

When classifying in groups  $\underline{A61L\ 27/02}$  -  $\underline{A61L\ 27/48}$ , classification is also made in groups  $\underline{A61L\ 27/50}$  -  $\underline{A61L\ 27/60}$  if the use of materials characterised by their function or physical properties is of interest.

When classifying in group A61L 27/00, classification is also made in A61L 33/00 if the materials used are antithrombogenic.

In group <u>A61L 27/00</u>, the use of specific polymers is indicated using the relevant classification symbols of subclass <u>C08L</u> preceded by a "comma",, e.g. prosthesis based on polyvinylchloride <u>A61L 27/16</u>, <u>C08L 27/06</u>.

When using combination classes for specifying the macromolecular materials the following rules apply:

Compositions of polysaccharides are combined with C08L 1/00 - C08L 5/16.

Compositions of rubber are combined with C08L 7/00 - C08L 21/02.

Compositions of macromolecular compounds obtained by reactions involving only carbon-to-carbon unsaturated bonds are combined with C08L 23/00 - C08L 57/12.

Special rules of classification

Compositions of macromolecular compounds obtained otherwise than by reactions involving only carbon-to-carbon unsaturated bonds are combined with <u>C08L 59/00</u> - <u>C08L 87/00</u>.

Compositions of natural macromolecular compounds or of derivatives thereof are combined with C08L 89/00 - C08L 89/06.

Mixtures of macromolecular compounds are only classified in  $\underline{A61L\ 27/26}$  and not in each individual subgroups  $\underline{A61L\ 27/16}$  -  $\underline{A61L\ 27/227}$ .

Each of the polymeric components of the mixture is classified in its correspondent <u>C08L</u> group, e.g. a bone graft comprising a mixture of chitosan and polyethylene glycol <u>A61L 27/26</u>, <u>C08L 5/08</u> and <u>A61L 27/26</u>, <u>C08L 71/02</u>.

Compositions of block copolymers are classified in C08L 53/00.

Growth factors are classified in A61L 27/54 as medicaments.

For the concerned medicaments (A61L 27/54) as additional information, a classification symbol in A61L 2300/00 is given.

Additional information concerning materials characterized by their function or physical properties, materials and methods for coating medical devices and materials for tissue regeneration are also classified in A61L 2400/00-A61L 2430/40.

A61L 27/36 covers ingredients of undetermined constitution or reaction products thereof such as products of natural origin (from plants or animals). This group will cover products such as natural silk derived from Bombyx mori, nacre, bees wax, honey, shellac, blood and blood-derived products (e.g. plasma, Plasma Rich Plasma [PRP], platelet concentrate), tissue fragments, Extracellular matrix (ECM), Submucosa (e.g. SIS), Essential oils, algae, diatomaceous earth.

A61L 27/38 covers materials for prostheses or grafts containing added animal cells, e.g. scaffolds containing seeded or cultured cells.

Materials for coating prostheses containing macromolecular materials are classified in <u>A61L 27/34</u>, the use of specific polymers is indicated using the relevant classification symbols of subclass <u>C08L</u> preceded by a "comma",, e.g. prosthesis coated with polyvinylchloride <u>A61L 27/34</u>, <u>C08L 27/06</u>.

#### Glossary of terms

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

Composite materials or composites	Materials made from two or more constituent materials with significantly different physical or chemical properties which remain separate and distinct at the macroscopic or microscopic scale within the finished structure.
PRP	Platelet Rich Plasma
SIS	Small Intestine Submucosa
Growth Factors (GF)	Naturally occurring substances capable of stimulating cellular growth, proliferation and cellular differentiation. Examples of GF are mentioned below:
ВМР	Bone morphogenetic proteins
TGF	Transforming Growth Factors,
VEGF	Vascular Endothelial Growth Factors,
FGF	Fibroblast Growth Factors,
IGF	Insulin Growth Factors
EGF	Epidermal Growth Factors

PDGF	Platelet-derived Growth Factors	
NGF	Nerve Growth Factors	
DBM	Demineralized Bone Matrix is allograft bone that has had the inorganic mineral removed, leaving behind the organic collagen matrix.	
PLA, PGA	Polylactic acid, Polyglycolic acid,	
PTFE	Polytetrafluoroethylene	
PMMA	Polymethylmethacrylate	
PVA	Polyvinyl alcohol	
EVA	Ethylene vinyl acetate	
PEG	Polyethylene Glycol	
СМС	Carboxymethylcellulose	
TCP	Tricalcium phosphate	
IOL	Intraocular lenses	
Tissue engineering	Interdisciplinary field that applies the principles of engineering and life sciences toward the development of biological substitutes that restore, maintain, or improve tissue function or a whole organ	
Osteoinduction	Stimulation of osteoprogenitor cells to differentiate into osteoblasts that then begin new bone formation.	
Osteoconduction	When the bone graft material serves as a scaffold for new bone growth that is perpetuated by the native bone	
Autograft, Autologous or Autogenous	Grafting utilizing tissue obtained from the same individual receiving the graft.	
Allograft	It is harvested from an individual from the same specie other than the one receiving the graft. Allograft tissue is taken from cadavers that have donated their tissue so that it can be used for living people who are in need of it	
Xenograft	Xenograft tissue substitute has its origin from a species other than human, such as bovine.	
Regenerative medicine	Synonym with tissue engineering.	
Tissue scaffold	Artificial structure capable of supporting three-dimensional tissue formation, often implanted or 'seeded' with cells.	
Alloplastic	Non-biological material such as metal, ceramic, and plastic.	

# Materials for colostomy devices (adhesives for colostomy devices A61L 24/00)

## **Definition statement**

This place covers:

Materials for ostomy pouching systems (colostomy bags) that provide a means for the collection of waste from a surgically diverted colon.

# Relationships with other classification places

Polymers are classified in **C08L**.

#### References

#### Limiting references

This place does not cover:

Adhesives for colostomy devices	A61L 24/00
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#### Informative references

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

Non-chemical aspects of colostomy devices	A61F 5/445
The state of the s	

# Special rules of classification

When classifying in group A61L 28/00, classification is also made in A61L 33/00 if the materials used are antithrombogenic.

In groups  $\underline{A61L\ 28/0011}$  and subgroups and  $\underline{A61L\ 28/0026}$ , the use of specific polymers is indicated by using the relevant classification symbols of subclass  $\underline{C08L}$  preceded by "comma",, e.g. colostomy bag containing PVC,  $\underline{A61L\ 28/0011}$ ,  $\underline{C08L\ 27/06}$ .

When using combination classes for specifying the macromolecular materials the following rules apply:

Compositions of polysaccharides are combined with C08L 1/00 - C08L 5/16.

Compositions of rubber are combined with C08L 7/00 - C08L 21/02.

Compositions of macromolecular compounds obtained by reactions involving only carbon-to-carbon unsaturated bonds are combined with C08L 23/00 - C08L 57/12.

Compositions of macromolecular compounds obtained otherwise than by reactions involving only carbon-to-carbon unsaturated bonds are combined with <u>C08L 59/00</u> - <u>C08L 87/00</u>.

Compositions of natural macromolecular compounds or of derivatives thereof are combined with C08L 89/00 - C08L 89/06.

Mixtures of macromolecular compounds are only classified in  $\underline{A61L\ 28/0026}$  and not in each individual subgroups  $\underline{A61L\ 28/0011}$  -  $\underline{A61L\ 28/0023}$ .

Each of the polymeric components of the mixture is classified in its correspondent <u>C08L</u> group, e.g. a colostomy bag comprising a mixture of polyurethane and polysiloxane <u>A61L 28/0026</u>, <u>C08L 75/04</u> and <u>A61L 28/0026</u>, <u>C08L 83/04</u>.

Compositions of block copolymers are classified in <u>C08L 53/00</u>.

Growth factors are classified in A61L 28/0038 as medicaments.

For the concerned medicaments ( $\underline{A61L\ 28/0038}$ ) as additional information, a classification symbol in  $\underline{A61L\ 2300/00}$  is given.

Additional information concerning materials characterized by their function or physical properties, materials and methods for coating medical devices and materials for tissue regeneration are also classified in A61L 2400/00-A61L 2430/40.

A61L 28/003 covers ingredients of undetermined constitution or reaction products thereof such as products of natural origin (from plants or animals) and cells. This group will cover products such as natural silk derived from Bombyx mori, nacre, bees wax, honey, shellac, blood and blood-derived products (e.g. plasma, Platelet Rich Plasma [PRP], platelet concentrate), tissue fragments, Extracellular matrix (ECM), Submucosa (e.g. SIS), Essential oils, algae, diatomaceous earth.

## **Glossary of terms**

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

Colostomy	An alternative exit from the colon created to divert waste through a hole in the colon and through the wall of the abdomen.
Composite materials or composites	Materials made from two or more constituent materials with significantly different physical or chemical properties which remain separate and distinct at the macroscopic or microscopic scale within the finished structure.

## A61L 29/00

Materials for catheters, {medical tubing, cannulae, or endoscopes} or for coating catheters (shape or structure of catheters A61M 25/00)

#### **Definition statement**

This place covers:

Chemical composition of materials used, or use of such materials, for catheters and catheter balloons or for coating catheters and catheter balloons and for medical tubing, cannulae or endoscopes.

Medical tubing comprises Feeding tubes, Nasogastric tubes, (Endo)Tracheal tubes, Drainage tubes, Dialysis tubing.

Catheter lock solutions for infusion into an indwelling intravascular catheter to inhibit infection related to the presence of the catheter.

# Relationships with other classification places

Polymers are classified in CO8L.

Lubricating compositions are classified in C10M.

Biocides are classified in A01N.

Non-chemical aspects of catheters and medical tubing are classified in A61M.

Production of tubular articles is classified in B29D 23/00.

Medical tubing for diagnosis, measuring or testing is classified in A61B.

#### References

#### Limiting references

This place does not cover:

Chemical aspects of needles	A61L 31/00
Chemical aspects of guidewires	A61L 31/00
Non-chemical aspects of endoscopes	A61B 1/005
Non-chemical aspects of feeding tubes	A61J 15/00
Non-chemical aspects of needles for surgery	A61M 5/158
Non-chemical aspects of catheters and medical tubing	A61M 25/00
Non-chemical aspects of guidewires	A61M 25/09
Non-chemical aspects of drainage tubes for wounds	A61M 27/00

Non-chemical aspects of dilators	A61M 29/00
Non-chemical aspects of catheters for uterus, vagina or rectum	A61M 31/00
Non-chemical aspects of medical tubes	A61M 39/08
Non-chemical aspects of medical tube connectors, tube couplings	A61M 39/10

#### Informative references

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

Dialysis systems; Artificial kidneys; Blood oxygenators	A61M 1/14
Non-chemical aspects of peritoneal catheters	A61M 1/285
Non-chemical aspects of drainage tubes	A61M 1/84
Nasal cannulae or tubing	A61M 16/00
Non-chemical aspects of tracheal tubes	A61M 16/04
Non-chemical aspects of multilayered (e.g. coated) catheters	A61M 25/0045
Non-chemical aspects of balloon-catheters	A61M 25/10
Making of balloon catheters	A61M 25/1027

# Special rules of classification

When classifying in groups  $\underline{A61L}$  29/02 -  $\underline{A61L}$  29/126, classification is also made in groups  $\underline{A61L}$  29/14 -  $\underline{A61L}$  29/18 if the use of materials characterised by their function or physical properties is of interest.

When classifying in group A61L 29/041, A61L 29/042, A61L 29/043, A61L 29/049, A61L 29/06, A61L 29/085, A61L 29/12, A61L 29/123 and A61L 29/126, the use of specific polymers is indicated using the relevant classification symbols of subclass C08L preceded by,, a "comma" e.g. a catheter based on polyvinylchloride A61L 29/041, C08L 27/06.

When using combination classes for specifying the macromolecular materials the following rules apply:

Compositions of polysaccharides are combined with <u>C08L 1/00</u> - <u>C08L 5/16</u>.

Compositions of rubber are combined with C08L 7/00 - C08L 21/02.

Compositions of macromolecular compounds obtained by reactions involving only carbon-to-carbon unsaturated bonds are combined with <u>C08L 23/00</u> - <u>C08L 57/12</u>.

Compositions of macromolecular compounds obtained otherwise than by reactions involving only carbon-to-carbon unsaturated bonds are combined with <u>C08L 59/00</u> - <u>C08L 87/00</u>.

Compositions of natural macromolecular compounds or of derivatives thereof are combined with C08L 89/00 - C08L 89/06 classification is also made in A61L 33/00 if the materials used are antithrombogenic.

Compositions of block copolymers are classified in C08L 53/00.

Mixtures of macromolecular compounds are only classified in  $\underline{A61L\ 29/049}$  and not in each individual subgroups  $\underline{A61L\ 29/041}$  -  $\underline{A61L\ 29/06}$ .

Each of the polymeric components of the mixture is classified in its correspondent <u>C08L</u> group, e.g. a catheter comprising a mixture of polyacrylate and polylactide <u>A61L 29/049</u>, <u>C08L 33/04</u> and A61L 29/049, <u>C08L 67/04</u>.

Special rules of classification

Growth factors are classified in A61L 29/16 as medicaments.

For the concerned medicaments ( $\underline{A61L\ 29/16}$ ) as additional information, a classification symbol in  $\underline{A61L\ 2300/00}$  is given.

Additional information concerning materials characterized by their function or physical properties, materials and methods for coating medical devices and materials for tissue regeneration are also classified in A61L 2400/00-A61L 2430/40.

In group A61L 29/18 materials at least partially X-ray or laser opaque include all kind of medical imaging material such as MRI contrast agents, ultrasound imaging agents, echogenic agents.

A61L 29/005 covers ingredients of undetermined constitution or reaction products thereof such as products of natural origin (from plants or animals) and cells. This group will cover products such as natural silk derived from Bombyx mori, nacre, bees wax, honey, shellac, blood and blood-derived products (e.g. plasma, Platelet Rich Plasma [PRP], platelet concentrate), tissue fragments, Extracellular matrix (ECM), Submucosa (e.g. SIS), Essential oils, algae, diatomaceous earth.

Materials for coating catheters containing macromolecular materials are classified in <u>A61L 29/085</u>, the use of specific polymers is indicated using the relevant classification symbols of subclass <u>C08L</u> preceded by a "comma",, e.g. catheters coated with polydimethyl siloxane A61L 29/085, C08L 83/04.

# **Glossary of terms**

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

Catheter	A tube that can be inserted into a body cavity, duct, or vessel to allow drainage, administration of fluids or gases, or access by surgical instruments.
Balloon catheter	A type of "soft" catheter with an inflatable "balloon" at its tip which is used during a catheterization procedure to enlarge a narrow opening or passage within the body. The deflated balloon catheter is positioned, then inflated to perform the necessary procedure, and deflated again in order to be removed.
Dilator	A (surgical) device used to dilate, distend, enlarge, expand, stretch an opening, organ, passage, tube, canal or cavity of a human or animal body.
Cannula	A tube that can be inserted into the body, often for the delivery or removal of fluid. Cannulae are introduced by means of a trocar needle.
Endoscope	An instrument used to examine the interior of a hollow organ or cavity of the body.
Tracheal tube	A catheter that is inserted into the trachea in order for the primary purpose of establishing and maintaining a patent airway and to ensure the adequate exchange of oxygen and carbon dioxide
Composite materials or composites	Materials made from two or more constituent materials with significantly different physical or chemical properties which remain separate and distinct at the macroscopic or microscopic scale within the finished structure.

#### A61L 31/00

Materials for other surgical articles {, 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 A61F 2/07, of stents A61F 2/82, of surgical gloves A61B 42/00, of surgical drapes A61B 46/00, of occluding devices A61B 17/12022)}

#### **Definition statement**

This place covers:

Chemical composition of materials used, or use of such materials, for stents, stent-grafts, shunts, surgical drapes, guide wires, adhesion barriers (Membranes for Guided Tissue Regeneration, GTR), coils (occluding devices), surgical gloves, condoms, medical needles, trocars, dialysis ports, plugs (fistula blockers, bone plugs...), surgical cutting devices including biopsy devices, tissue fixation devices (clamps, clips, nails, plates, plugs, screws, suture anchors...), meshes (hernia meshes), devices for surgical treatment of incontinence (e.g. urethral slings), filters (e.g. vena cava filters), stent covers, vascular access ports (e.g. dialysis ports).

## Relationships with other classification places

Polymers are classified in CO8L.

Surgical instruments, devices or methods are classified in A61B 17/00.

Devices providing patency to, or preventing collapsing of, tubular structures of the body, e.g. stents, are classified in A61F 2/82.

#### References

## Limiting references

This place does not cover:

Non-chemical aspects of surgeons' or patients' gowns or dresses, surgical masks	A41D 13/12
Gloves in general	A41D 19/00
Non-chemical aspect of occluding devices	A61B 17/12022
Non-chemical aspects of bone fixation devices (e.g. screws, nails, plates)	<u>A61B 17/58</u>
Non-chemical aspects of surgical gloves	A61B 42/00
Non-chemical aspects of surgical drapes	A61B 46/00
Non-chemical aspects of stent-grafts or graft for the treatment of aneurysms	<u>A61F 2/07</u>
Non-chemical aspects of stents	A61F 2/82
Intragastrical devices	A61F 5/0036
Gastric Bands	A61F 5/005
Devices for preventing snoring	A61F 5/56
Radioactive stents	A61K 51/1282

#### Informative references

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

Sensors specially adapted to be brought in contact with an internal body part.	A61B 5/6846
Instruments for taking a cell sample or for biopsy	A61B 10/02
Non-chemical aspects of biopsy needles	A61B 10/0233
Non-chemical aspects of needles for suturing	A61B 17/06
Non-chemical aspects of bone staples	A61B 17/0642
Non-chemical aspects of trocars, puncturing needles	A61B 17/34
Non-chemical aspects of cannulae	A61B 17/3421
Non-chemical aspects of intramedullary devices (pins, nails)	A61B 17/72
Non-chemical aspects of osteosynthesis instruments	A61B 17/88
Dental regeneration membranes	A61C 8/0006
Dental fixation means	A61C 8/0018
Closure means for urethra or rectum, i.e. anti-incontinence devices or support slings against pelvic prolapse	A61F 2/0004
Non-chemical aspects of cosmetic or alloplastic implants	A61F 2/0059
Non-chemical aspects of implants for hernia repair or support, e.g. repair meshes	A61F 2/0063
Non-chemical aspects of condoms	A61F 6/04
Non-chemical aspects of acupuncture needles	A61H 39/086
Containers for storing or transfusion of blood or plasma (blood bags)	A61J 1/05
Nuclear magnetic resonance (NMR) contrast preparations; Magnetic resonance imaging (MRI) contrast preparation	A61K 49/06
Preparations containing radioactive substances for use in therapy or testing in vivo	A61K 51/12
Non-chemical aspects of needles for surgery	A61M 5/158
Non-chemical aspects of syringes	A61M 5/32

# Special rules of classification

Growth factors are classified in A61L 31/16 as medicaments.

For the concerned medicaments (A61L 31/16) as additional information, a classification symbol in A61L 2300/00 is given.

Additional information concerning materials characterized by their function or physical properties, materials and methods for coating medical devices and materials for tissue regeneration are also classified in A61L 2400/00-A61L 2430/40.

In group A61L 31/18 materials at least partially X-ray or laser opaque include all kind of medical imaging material such as MRI contrast agents, ultrasound imaging agents, echogenic agents.

A61L 31/005 covers ingredients of undetermined constitution or reaction products thereof such as products of natural origin (from plants or animals) and cells. This group will cover products such as natural silk derived from Bombyx mori, nacre, bees wax, honey, shellac, blood and blood-derived products (e.g. plasma, Platelet Rich Plasma [PRP], platelet concentrate), tissue fragments, Extracellular matrix (ECM), Submucosa (e.g. SIS), Essential oils, algae, diatomaceous earth.

When classifying in groups A61L 31/02 - A61L 31/129, classification is also made in groups A61L 31/14 - A61L 31/18 if the use of materials characterised by their function or physical properties is of interest.

When classifying in group  $\underline{A61L\ 31/00}$ , classification is also made in  $\underline{A61L\ 33/00}$  if the materials used are antithrombogenic.

In group <u>A61L 31/00</u>, the use of specific polymers is indicated using the relevant classification symbols of subclass <u>C08L</u> preceded by a "comma", e.g. surgical clamp based on polyvinylchloride <u>A61L 31/048</u>, <u>C08L 27/06</u>.

When classifying in group A61L 31/041, A61L 31/042, A61L 31/048, A61L 31/049, A61L 31/06, A61L 31/10, A61L 31/125, A61L 31/126, A61L 31/127, A61L 31/127, A61L 31/128 and A61L 31/129, the use of specific polymers is indicated using the relevant classification symbols of subclass C08L preceded by a "comma", e.g. a stent based on polyurethane A61L 31/06, C08L 75/04.

When using combination classes for specifying the macromolecular materials the following rules apply:

Compositions of polysaccharides are combined with CO8L 1/00 - CO8L 5/16.

Compositions of rubber are combined with C08L 7/00 - C08L 21/02.

Compositions of macromolecular compounds obtained by reactions involving only carbon-to-carbon unsaturated bonds are combined with <u>C08L 23/00</u> - <u>C08L 57/12</u>.

Compositions of macromolecular compounds obtained otherwise than by reactions involving only carbon-to-carbon unsaturated bonds are combined with C08L 59/00 - C08L 87/00.

Compositions of natural macromolecular compounds or of derivatives thereof are combined with C08L 89/00 - C08L 89/06 classification is also made in A61L 33/00 if the materials used are antithrombogenic.

Compositions of block copolymers are classified in C08L 53/00.

Mixtures of macromolecular compounds are only classified in  $\underline{A61L\ 31/041}$  and not classified in each individual subgroups  $\underline{A61L\ 31/042}$  -  $\underline{A61L\ 31/06}$ .

Each of the polymeric components of the mixture is classified in its correspondent <u>C08L</u> group, e.g. a stent comprising a mixture of polyacrylate and polylactide <u>A61L 31/041</u>, <u>C08L 33/04</u> and <u>A61L 31/041</u>, <u>C08L 67/04</u>.

Materials for coating other surgical articles containing macromolecular materials are classified in A61L 31/10, the use of specific polymers is indicated using the relevant classification symbols of subclass C08L preceded by a "comma", e.g. stent coated with polylactide A61L 31/10, C08L 67/04.

#### Glossary of terms

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

Stent	Artificial 'tube' inserted into a natural passage/conduit in the body to prevent, or counteract, a disease-induced, localized flow constriction. The term may also refer to a tube used to temporarily hold such a natural conduit open to allow access for surgery
Stent-graft	Tubular device composed of special fabric supported by a rigid structure, the stent, which is usually metal. The device is used primarily in endovascular surgery. Stent grafts support weak points in arteries; such a point is commonly known as an aneurysm.
Shunt	By-pass or divert

Guide-wires	Facilitate the delivery of a wide variety of catheters, stents and other interventional devices to a procedure site within the body
Medical Coils	Occluding device, e.g. Guglielmi Detachable Coil, or GDC, is a platinum coil commonly used in intracranial non-invasive surgery for the occlusion of brain aneurysms
Mesh	Mesh consists of semi-permeable barrier made of connected strands of metal, fiber, or other flexible/ductile material. Mesh is similar to web or net in that it has many attached or woven strands. For example, hernia mesh or patch.
Adhesion barriers (Materials for adhesion prevention)	Medical implants that can be used to reduce abnormal internal scarring (adhesions) following surgery by separating the internal tissues and organs while they heal
Suture anchors	Fixation devices for fixing tendons and ligaments to bone. They are made up of: the anchor, which is inserted into the bone (e.g. a screw); the eyelet, which is a hole or a loop in the anchor to through which the suture passes. This links the anchor to the suture; the suture which is attached to the anchor by through the eyelet of the anchor
Composite materials or composites	Materials made from two or more constituent materials with significantly different physical or chemical properties which remain separate and distinct at the macroscopic or microscopic scale within the finished structure
GTR	Guided Tissue Regeneration

# A61L 33/00

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

#### **Definition statement**

This place covers:

Chemical composition of materials, or use of materials, for antithrombogenic treatment of surgical articles, e.g. sutures, catheters, prostheses, or of articles for the manipulation or conditioning of blood.

#### References

#### Informative references

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

Containers for storing or transfusion of blood or plasma (blood bags)	A61J 1/05
Dialysis systems; Artificial kidneys; Blood oxygenators	A61M 1/14

# Special rules of classification

When classifying in groups  $\underline{A61L\ 33/02}$  -  $\underline{A61L\ 33/122}$ , classification is also made in group A61L 33/0005 if of interest.

In group  $\underline{A61L\ 33/00}$ , the use of specific polymers is indicated using the relevant classification symbols of subclass  $\underline{C08L}$  preceded by a "comma", e.g. antithrombogenic treatment with the help of polyvinylchloride  $\underline{A61L\ 33/064}$ ,  $\underline{C08L\ 27/06}$ .

# **Glossary of terms**

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

Antithrombogenic,	Reduces thrombus formation, e.g. antiplatelet drugs,
antithrombotic	anticoagulants, thrombolytic drugs, fibrinolytic agents

# A61L 2430/36

# for embolization or occlusion, e.g. vaso-occlusive compositions or devices

# References

# Informative references

Materials characterised by their function for artificial blood vessels	A61L 27/507
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