

**CPC****COOPERATIVE PATENT CLASSIFICATION****D06M**

**TREATMENT, NOT PROVIDED FOR ELSEWHERE IN CLASS [D06](#) , OF FIBRES, THREADS, YARNS, FABRICS, FEATHERS, OR FIBROUS GOODS MADE FROM SUCH MATERIALS** (surface treatment of fibres or filaments from glass, minerals or slags { also in the form of fabrics if the chemical aspects of the treatment are important } [C03C 25/00](#); treatment of textiles by mechanical means, see [D06B](#) to [D06J](#) )

**NOTE**

In each of the groups [D06M 11/00](#) to [D06M 15/00](#), in the absence of an indication to the contrary, a substance is classified in the last appropriate place.

Within each one of main groups [D06M 11/00](#) to [D06M 15/00](#), a mixture of substances is classified at least according to the essential ingredient. If more than one ingredient is essential, the mixture is classified, in the absence of an indication to the contrary, according to the essential ingredient which belongs to the last appropriate place in the sequence of substances;

Treatment by mixtures of substances covered by two or more of main groups [D06M 11/00](#) to [D06M 15/00](#) is classified in each appropriate main group.

In this subclass, the treatment of textiles, not provided for elsewhere in class [D06](#) , is classified according to the following principles:

- Treatment of textiles characterised by the treating agent in groups [D06M 11/00](#) to [D06M 16/00](#);
- Treatment of textiles characterised by the process in group [D06M 23/00](#).

**Guidance heading:****D06M 7/00**

**Treating fibres, threads, yarns, fabrics, or fibrous goods made of other substances with subsequent freeing of the treated goods from the treating medium, e.g. swelling, {e.g. polyolefins } ([D06M 10/00](#) takes precedence; treating fibres or filaments made of glass, mineral -, or slag wool [C03C](#) ; {carbon fibres [D01F 11/10](#) })**

**D06M 7/005**

- . {made of asbestos }

**D06M 10/00**

**Physical treatment of fibres, threads, yarns, fabrics, or fibrous goods made from such materials, e.g. ultrasonic, corona discharge, irradiation, electric currents, magnetic fields; Physical treatment combined with treatment with chemical compounds or elements**

**D06M 10/001**

- . {Treatment with visible light, infra-red or ultra-violet, X-rays }

**D06M 10/003**

- . {Treatment with radio-waves or micro-waves }

**D06M 10/005**

- . {Laser beam treatment }

**D06M 10/006**

- . {Ultra-high-frequency heating }

- D06M 10/008 . {Treatment with radioactive elements or with neutrons, alpha, beta or gamma rays }
- D06M 10/02 . ultrasonic or sonic; Corona discharge
- D06M 10/025 . . {Corona discharge or low temperature plasma }
- D06M 10/04 . Physical treatment combined with treatment with chemical compounds or elements (graft polymerisation using wave energy or particle radiation [D06M 14/18](#); {treatment with radioactive elements [D06M 10/008](#) })
- D06M 10/06 . . Inorganic compounds or elements
- D06M 10/08 . . Organic compounds
- D06M 10/10 . . . Macromolecular compounds

**D06M 11/00** **Treating fibres, threads, yarns, fabrics, or fibrous goods made from such materials, with inorganic substances or complexes thereof; Such treatment combined with mechanical treatment, e.g. mercerising ([D06M 10/00](#) takes precedence; decorating textiles by local treatment [D06Q 1/00](#))**

#### **NOTE**

If a compound used in the treatment is characterised by its cation, it is classified in group [D06M 11/00](#); metallisation by treatment with a metal salt, followed by reduction, is classified in group [D06M 11/83](#).

In this group, the following term is used with the meaning indicated:

- "treatment" means, in the absence of an indication to the contrary, the treatment which leads to the end product, e.g. treatment with barium sulfate can mean treatment with barium chloride and with sulfuric acid in two separate steps

- D06M 11/01 . with hydrogen, water or heavy water; with hydrides of metals or complexes thereof; with boranes, diboranes, silanes, disilanes, phosphines, diphosphines, stibines, distibines, arsines, or diarsines or complexes thereof
- D06M 11/05 . . with water, e.g. steam; with heavy water
- D06M 11/07 . with halogens; with halogen acids or salts thereof; with oxides or oxyacids of halogens or salts thereof
- D06M 11/09 . . with free halogens or interhalogen compounds
- D06M 11/11 . . with halogen acids or salts thereof
- D06M 11/13 . . . Ammonium halides or halides of elements of the first Group of the Periodic System
- D06M 11/155 . . . Halides of elements of the second Group of the Periodic System
- D06M 11/17 . . . Halides of elements of the third Group of the Periodic System
- D06M 11/20 . . . Halides of elements of the fourth Group of the Periodic System, e.g. zirconyl chloride
- D06M 11/22 . . . Halides of elements of the fifth Group of the Periodic System
- D06M 11/24 . . . Halides of elements of the sixth Group of the Periodic System, e.g. chromyl chloride
- D06M 11/26 . . . Halides of elements of the seventh Group of the Periodic System ([interhalogen](#)

- compounds [D06M 11/09](#))
- D06M 11/28 . . . Halides of elements of the eighth Group of the Periodic System
- D06M 11/30 . . with oxides of halogens, oxyacids of halogens or their salts, e.g. with perchlorates
- D06M 11/32 . with oxygen, ozone, ozonides, oxides, hydroxides or percompounds; Salts derived from anions with an amphoteric element-oxygen bond ([with water or heavy water D06M 11/05](#); [with oxides or oxyacids of halogens D06M 11/30](#); [bleaching D06L](#) )
- D06M 11/34 . . with oxygen, ozone or ozonides
- D06M 11/36 . . with oxides, hydroxides or mixed oxides; with salts derived from anions with an amphoteric element-oxygen bond
- D06M 11/38 . . . Oxides or hydroxides of elements of the first Group of the Periodic System ([producing patterns by locally destroying or modifying the fibres by chemical action D06Q 1/02](#))
- D06M 11/385 . . . . {Saponification of cellulose-acetate }
- D06M 11/40 . . . . combined with, or in absence of, mechanical tension, e.g. slack mercerising
- D06M 11/42 . . . . Oxides or hydroxides of copper, silver or gold
- D06M 11/44 . . . Oxides or hydroxides of elements of the second Group of the Periodic System; Zincates; Cadmates
- D06M 11/45 . . . Oxides or hydroxides of elements of the third Group of the Periodic System; Aluminates
- D06M 11/46 . . . Oxides or hydroxides of elements of the fourth Group of the Periodic System; Titanates; Zirconates; Stannates; Plumbates
- D06M 11/47 . . . Oxides or hydroxides of elements of the fifth Group of the Periodic System; Vanadates; Niobates; Tantalates; Arsenates; Antimonates; Bismuthates
- D06M 11/48 . . . Oxides or hydroxides of chromium, molybdenum or tungsten; Chromates; Dichromates; Molybdates; Tungstates
- D06M 11/485 . . . . {Oxides or hydroxides of manganese; Manganates ([permanganates D06M 11/50](#)) }
- D06M 11/49 . . . Oxides or hydroxides of elements of the eighth Group of the Periodic System; Ferrates; Cobaltates; Nickelates; Ruthenates; Osmates; Rhodates; Iridates; Palladates; Platinates
- D06M 11/50 . . with hydrogen peroxide or peroxides of metals; with persulfuric, permanganic, pernitric, percarbonic acids or their salts
- D06M 11/51 . with sulfur, selenium, tellurium, polonium or compounds thereof ([with persulfuric acids or their salts D06M 11/50](#))
- D06M 11/52 . . with selenium, tellurium, polonium or their compounds; with sulfur, dithionites or compounds containing sulfur and halogens, with or without oxygen; by sulfohalogenation with chlorosulfonic acid; by sulfohalogenation with a mixture of sulfur dioxide and free halogens
- D06M 11/53 . . with hydrogen sulfide or its salts; with polysulfides
- D06M 11/54 . . with sulfur dioxide; with sulfurous acid or its salts ([D06M 11/52 takes precedence](#))
- D06M 11/55 . . with sulfur trioxide; with sulfuric acid or thiosulfuric acid or their salts
- D06M 11/56 . . . Sulfates or thiosulfates other than of elements of the third Group of the Periodic System
- D06M 11/57 . . . Sulfates or thiosulfates of elements of the third Group of the Periodic System, e.g. alums
- D06M 11/58 . with nitrogen or compounds thereof, e.g. with nitrides ([with ammonium halides D06M 11/13](#))

- D06M 11/59 . . with ammonia; with complexes of organic amines with inorganic substances
- D06M 11/60 . . . Ammonia as a gas or in solution
- D06M 11/61 . . . Liquid ammonia
- D06M 11/62 . . . Complexes of metal oxides or complexes of metal salts with ammonia or with organic amines
- D06M 11/63 . . with hydroxylamine or hydrazine
- D06M 11/64 . . with nitrogen oxides; with oxyacids of nitrogen or their salts ([with pernitric acids or their salts D06M 11/50](#))
- D06M 11/65 . . . Salts of oxyacids of nitrogen
- D06M 11/66 . . with sulfamic acid or its salts
- D06M 11/67 . . with cyanogen or compounds thereof, e.g. with cyanhydric acid, cyanic acid, isocyanic acid, thiocyanic acid, isothiocyanic acid or their salts, or with cyanamides; with carbamic acid or its salts ([with dicyanamides D06M 13/432](#))
- D06M 11/68 . with phosphorus or compounds thereof, e.g. with chlorophosphonic acid or salts thereof ([with phosphines or diphosphines D06M 11/01](#); [with selenium or tellurium compounds D06M 11/52](#); [with polyphosphazene or derivatives thereof D06M 15/673](#))
- D06M 11/69 . . with phosphorus; with halides or oxyhalides of phosphorus; with chlorophosphonic acid or its salts
- D06M 11/70 . . with oxides of phosphorus; with hypophosphorous, phosphorous or phosphoric acids or their salts
- D06M 11/71 . . . Salts of phosphoric acids
- D06M 11/72 . . with metaphosphoric acids or their salts; with polyphosphoric acids or their salts; with perphosphoric acids or their salts
- D06M 11/73 . with carbon or compounds thereof ([D06M 11/67 takes precedence](#))
- D06M 11/74 . . with carbon or graphite; with carbides; with graphitic acids or their salts
- D06M 11/75 . . with phosgene; with compounds containing both carbon and sulfur, e.g. thiophosgene ([with thiocyanic acid D06M 11/67](#); [with thiocarbamic acid D06M 13/425](#); [with thiourea D06M 13/432](#))
- D06M 11/76 . . with carbon oxides or carbonates ([D06M 11/75 takes precedence](#); [with percarbonic acids or their salts D06M 11/50](#); [with urea D06M 13/432](#))
- D06M 11/77 . with silicon or compounds thereof ([with silanes or disilanes D06M 11/01](#))
- D06M 11/78 . . with silicon; with halides or oxyhalides of silicon; with fluorosilicates
- D06M 11/79 . . with silicon dioxide, silicic acids or their salts
- D06M 11/80 . with boron or compounds thereof, e.g. borides ([with boranes or diboranes D06M 11/01](#); [with boron carbides D06M 11/74](#))
- D06M 11/81 . . with boron; with boron halides; with fluoroborates
- D06M 11/82 . . with boron oxides; with boric, meta- or perboric acids or their salts, e.g. with borax
- D06M 11/83 . with metals; with metal-generating compounds, e.g. metal carbonyls; Reduction of metal compounds on textiles ([decorating textiles by locally metallising D06Q 1/04](#))
- D06M 11/84 . combined with mechanical treatment ([combined with mechanical tension, e.g. mercerising D06M 11/40](#))
- D06M 13/00** **Treating fibres, threads, yarns, fabrics or fibrous goods made from such materials, with non-macromolecular organic compounds** ([D06M 10/00](#), [D06M 14/00 take precedence](#); [treatment with complexes of organic amines with inorganic substances](#))

**D06M 11/59 ; Such treatment combined with mechanical treatment****NOTE**

In this group the following term is used with the meaning indicated:

- "treatment" means, in the absence of an indication to the contrary, the treatment which leads to the end product, e.g. treatment with chloroacetic acid can mean treatment with chloroacetylchloride and saponification in two separate steps

- D06M 13/005 . {Compositions containing perfumes; Compositions containing deodorants }
- D06M 13/02 . with hydrocarbons
- D06M 13/03 . . with unsaturated hydrocarbons, e.g. alkenes, alkynes
- D06M 13/07 . . . Aromatic hydrocarbons
- D06M 13/08 . with halogenated hydrocarbons
- D06M 13/085 . . {cycloaliphatic }
- D06M 13/10 . with compounds containing oxygen
- D06M 13/11 . . Compounds containing epoxy groups or precursors thereof
- D06M 13/12 . . Aldehydes; Ketones
- D06M 13/123 . . . Polyaldehydes; Polyketones
- D06M 13/127 . . . Mono-aldehydes, e.g. formaldehyde; Monoketones
- D06M 13/13 . . . Unsaturated aldehydes, e.g. acrolein; Unsaturated ketones; Ketenes; {Diketenes }
- D06M 13/133 . . . Halogenated aldehydes; Halogenated ketones; {Halogenated ketenes }
- D06M 13/137 . . Acetals, e.g. formals, ketals
- D06M 13/144 . . Alcohols; Metal alcoholates ([D06M 13/11 takes precedence](#))
- D06M 13/148 . . . Polyalcohols, e.g. glycerol {or glucose }
- D06M 13/152 . . having a hydroxy group bound to a carbon atom of a six-membered aromatic ring
- D06M 13/156 . . . containing halogen atoms
- D06M 13/165 . . Ethers ([D06M 13/11 takes precedence](#))
- D06M 13/17 . . . Polyoxyalkyleneglycol ethers
- D06M 13/175 . . . Unsaturated ethers, e.g. vinyl ethers
- D06M 13/184 . . Carboxylic acids; Anhydrides, halides or salts thereof
- D06M 13/1845 . . . {Aromatic mono- or polycarboxylic acids }
- D06M 13/188 . . . Monocarboxylic acids; Anhydrides, halides or salts thereof { ([D06M 13/1845 takes precedence](#)) }
- D06M 13/192 . . . Polycarboxylic acids; Anhydrides, halides or salts thereof { ([D06M 13/1845 takes precedence](#)) }
- D06M 13/196 . . . Percarboxylic acids; Anhydrides, halides or salts thereof
- D06M 13/203 . . . Unsaturated carboxylic acids; Anhydrides, halides or salts thereof
- D06M 13/2035 . . . . {Aromatic acids }

D06M 13/207	...	Substituted carboxylic acids, e.g. by hydroxy or keto groups; Anhydrides, halides or salts thereof
D06M 13/21	....	Halogenated carboxylic acids; Anhydrides, halides or salts thereof
D06M 13/213	.....	Perfluoroalkyl carboxylic acids; Anhydrides, halides or salts thereof
D06M 13/217	....	Polyoxyalkyleneglycol ethers with a terminal carboxyl group; Anhydrides, halides or salts thereof
D06M 13/224	..	Esters of carboxylic acids; Esters of carbonic acid
D06M 13/2243	...	{Mono-, di-, or triglycerides }
D06M 13/2246	...	{Esters of unsaturated carboxylic acids }
D06M 13/228	...	Cyclic esters, e.g. lactones
D06M 13/232	...	Organic carbonates
D06M 13/236	...	containing halogen atoms
D06M 13/238	...	Tannins, e.g. gallotannic acids
D06M 13/244	.	with compounds containing sulfur or phosphorus
D06M 13/248	..	with compounds containing sulfur
D06M 13/252	...	Mercaptans, thiophenols, sulfides or polysulfides, e.g. mercapto acetic acid; Sulfonium compounds
D06M 13/256	...	Sulfonated compounds {esters thereof, e.g. sultones }
D06M 13/262	...	Sulfated compounds {thiosulfates }
D06M 13/265	...	containing halogen atoms
D06M 13/268	...	Sulfones
D06M 13/272	...	Unsaturated compounds containing sulfur atoms
D06M 13/275	....	Vinylthioethers
D06M 13/278	....	Vinylsulfonium compounds; Vinylsulfone or vinylsulfoxide compounds
D06M 13/282	..	with compounds containing phosphorus
D06M 13/285	...	Phosphines; Phosphine oxides; Phosphine sulfides; Phosphinic or phosphinous acids or derivatives thereof
D06M 13/288	...	Phosphonic or phosphonous acids or derivatives thereof
D06M 13/29	....	containing halogen atoms
D06M 13/292	...	Mono-, di- or triesters of phosphoric or phosphorous acids; Salts thereof
D06M 13/295	....	containing polyglycol moieties; containing neopentyl moieties
D06M 13/298	....	containing halogen atoms
D06M 13/313	...	Unsaturated compounds containing phosphorus atoms, e.g. vinylphosphonium compounds
D06M 13/322	.	with compounds containing nitrogen
D06M 13/325	..	Amines
D06M 13/3255	...	{Vinylamine; Allylamine }
D06M 13/328	...	the amino group being bound to an acyclic or cycloaliphatic carbon atom
D06M 13/33	....	containing halogen atoms
D06M 13/332	...	Di- or polyamines
D06M 13/335	...	having an amino group bound to a carbon atom of a six-membered aromatic ring
D06M 13/338	...	Organic hydrazines; Hydrazinium compounds

D06M 13/342	...	Amino-carboxylic acids; Betaines; Aminosulfonic acids; Sulfo-betaines
D06M 13/345	..	Nitriles
D06M 13/348	...	unsaturated, e.g. acrylonitrile
D06M 13/35	..	Heterocyclic compounds
D06M 13/352	...	having five-membered heterocyclic rings
D06M 13/355	...	having six-membered heterocyclic rings
D06M 13/358	....	Triazines
D06M 13/364	.....	Cyanuric acid; Isocyanuric acid; Derivatives thereof
D06M 13/368	..	Hydroxyalkylamines; Derivatives thereof, e.g. Kritchevsky bases
D06M 13/372	..	containing etherified or esterified hydroxy groups {Polyethers of low molecular weight }
D06M 13/376	..	Oximes
D06M 13/382	..	Aminoaldehydes
D06M 13/385	..	containing epoxy groups
D06M 13/388	..	Amine oxides
D06M 13/392	..	Nitroso compounds; Nitro compounds
D06M 13/395	..	Isocyanates
D06M 13/398	...	containing fluorine atoms
D06M 13/402	..	Amides {imides, sulfamic acids }
D06M 13/405	...	Acylated polyalkylene polyamines
D06M 13/408	...	Acylated amines containing fluorine atoms; Amides of perfluoro carboxylic acids
D06M 13/41	...	Amides derived from unsaturated carboxylic acids, e.g. acrylamide
D06M 13/412	....	N-methylolacrylamides
D06M 13/415	...	Amides of aromatic carboxylic acids; Acylated aromatic amines
D06M 13/418	...	Cyclic amides, e.g. lactams; Amides of oxalic acid
D06M 13/419	...	Amides having nitrogen atoms of amide groups substituted by hydroxyalkyl or by etherified or esterified hydroxyalkyl groups
D06M 13/422	...	Hydrazides
D06M 13/425	...	Carbamic or thiocarbamic acids or derivatives thereof, e.g. urethanes (unsubstituted carbamic acid <a href="#">D06M 11/67</a> )
D06M 13/428	....	containing fluorine atoms
D06M 13/432	...	Urea, thiourea or derivatives thereof, e.g. biurets ; Urea-inclusion compounds ; Dicyanamides; {Carbodiimides; } Guanidines, e.g. dicyandiamides
D06M 13/435	...	Semicarbazides
D06M 13/438	...	Sulfonamides {; Sulfamic acids }
D06M 13/44	..	containing nitrogen and phosphorus
D06M 13/447	...	Phosphonates or phosphinates containing nitrogen atoms
D06M 13/453	...	Phosphates or phosphites containing nitrogen atoms
D06M 13/46	..	Compounds containing quaternary nitrogen atoms (hydrazinium compounds <a href="#">D06M 13/338</a> ; betaines, sulfo-betaines <a href="#">D06M 13/342</a> )
D06M 13/461	...	{Quaternised amin-amides from polyamines or heterocyclic compounds or polyamino-acids }
D06M 13/463	...	derived from monoamines
D06M 13/467	...	derived from polyamines



- D06M 13/47 . . . derived from heterocyclic compounds
- D06M 13/473 . . . . having five-membered heterocyclic rings
- D06M 13/477 . . . . having six-membered heterocyclic rings
- D06M 13/48 . . containing the ethylene imine ring
- D06M 13/487 . . Aziridinylphosphines; Aziridinylphosphine-oxides or sulfides; Carbonylaziridinyl or carbonylbisaziridinyl compounds; Sulfonylaziridinyl or sulfonylbisaziridinyl compounds
- D06M 13/493 . . . perfluorinated
- D06M 13/50 . with organometallic compounds; with organic compounds containing boron, silicon, selenium or tellurium atoms
- D06M 13/503 . . without bond between a carbon atom and a metal or a boron, silicon, selenium or tellurium atom
- D06M 13/507 . . . Organic silicon compounds without carbon-silicon bond
- D06M 13/51 . . Compounds with at least one carbon-metal or carbon-boron, carbon-silicon, carbon-selenium, or carbon-tellurium bond
- D06M 13/513 . . . with at least one carbon-silicon bond
- D06M 13/5135 . . . . {Unsaturated compounds containing silicon atoms }
- D06M 13/517 . . . . containing silicon-halogen bonds
- D06M 13/52 . combined with mechanical treatment ([decorating textiles D06Q](#) )
- D06M 13/522 . . {Fulling }
- D06M 13/525 . . Embossing; Calendering; Pressing ([moulding D06M 23/14](#))
- D06M 13/53 . . Cooling; Steaming or heating, e.g. in fluidised beds; with molten metals
- D06M 13/535 . . Suction; Vacuum treatment; Degassing; Blowing
- D06M 14/00** **Graft polymerisation of monomers containing carbon-to-carbon unsaturated bonds on to fibres, threads, yarns, fabrics, or fibrous goods made from such materials ([on to unshaped polymers C08F 251/00 to C08F 292/00](#))**
- D06M 14/02 . on to materials of natural origin ([D06M 14/18 takes precedence](#))
- D06M 14/04 . . of vegetal origin, e.g. cellulose or derivatives thereof
- D06M 14/06 . . of animal origin, e.g. wool or silk
- D06M 14/08 . on to materials of synthetic origin ([D06M 14/18 takes precedence](#))
- D06M 14/10 . . of macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds
- D06M 14/12 . . of macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds
- D06M 14/14 . . . Polyesters
- D06M 14/16 . . . Polyamides
- D06M 14/18 . using wave energy or particle radiation
- D06M 14/20 . . on to materials of natural origin
- D06M 14/22 . . . of vegetal origin, e.g. cellulose or derivatives thereof
- D06M 14/24 . . . of animal origin, e.g. wool, silk



- D06M 14/26 . . on to materials of synthetic origin
- D06M 14/28 . . . of macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds
- D06M 14/30 . . . of macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds
- D06M 14/32 . . . . Polyesters
- D06M 14/34 . . . . Polyamides
- D06M 14/36 . on to carbon fibres
  
- D06M 15/00** **Treating fibres, threads, yarns, fabrics, or fibrous goods made from such materials, with macromolecular compounds; Such treatment combined with mechanical treatment** ([D06M 10/00](#), [D06M 14/00](#) take precedence; {treatment with inorganic polyphosphates [D06M 11/72](#) })
  
- NOTE**
- In this group, the following term is used with the meaning indicated:
  - "treatment" means, in the absence of an indication to the contrary, the treatment which leads to the end product, e.g.
    - a) treatment with polyvinylalcohol can mean treatment with polyvinylacetate and subsequent saponification in a separate step
    - b) treatment with aminoplast can mean the delayed cure process or the treatment with precondensation products, or with e.g. urea and with formaldehyde in two separate steps
  
- D06M 15/01 . with natural macromolecular compounds or derivatives thereof ([with natural rubber or derivatives thereof D06M 15/693](#))
- D06M 15/03 . . Polysaccharides or derivatives thereof
- D06M 15/035 . . . {Polymeric alcohol xanthates }
- D06M 15/05 . . . Cellulose or derivatives thereof
- D06M 15/055 . . . . with the residual liquors derived of the sulfatic process for the preparation of cellulose
- D06M 15/07 . . . . Cellulose esters
- D06M 15/09 . . . . Cellulose ethers
- D06M 15/11 . . . Starch or derivatives thereof
- D06M 15/13 . . . Alginic acid or derivatives thereof
- D06M 15/15 . . Proteins or derivatives thereof
- D06M 15/155 . . . {Treatment in the presence of salts derived from amphoteric metal hydroxides }
- D06M 15/17 . . Natural resins, resinous alcohols, resinous acids, or derivatives thereof
  
- D06M 15/19 . with synthetic macromolecular compounds ([with synthetic rubber D06M 15/693](#))
- D06M 15/195 . . {sulfated or sulfonated }
- D06M 15/21 . . Macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds
- D06M 15/227 . . . of hydrocarbons, or reaction products thereof, e.g. afterhalogenated or sulfochlorinated

D06M 15/233	....	aromatic, e.g. styrene
D06M 15/244	...	of halogenated hydrocarbons ( <a href="#">afterhalogenated hydrocarbons D06M 15/227</a> )
D06M 15/248	....	containing chlorine
D06M 15/252	....	containing bromine
D06M 15/256	....	containing fluorine
D06M 15/263	...	of unsaturated carboxylic acids; Salts or esters thereof
D06M 15/267	....	of unsaturated carboxylic esters having amino or quaternary ammonium groups
D06M 15/27	....	of alkylpolyalkylene glycol esters of unsaturated carboxylic acids
D06M 15/273	....	of unsaturated carboxylic esters having epoxy groups
D06M 15/2735	.....	{ <a href="#">of unsaturated carboxylic esters having mercapto groups</a> }
D06M 15/277	....	containing fluorine
D06M 15/285	...	of unsaturated carboxylic acid amides or imides
D06M 15/29	....	containing a N-methylol group or an etherified N-methylol group; containing a N-aminomethylene group; containing a N-sulfidomethylene group
D06M 15/295	....	containing fluorine
D06M 15/31	...	of unsaturated nitriles
D06M 15/327	...	of unsaturated alcohols or esters thereof
D06M 15/33	....	Esters containing fluorine
D06M 15/333	....	of vinyl acetate; Polyvinylalcohol
D06M 15/3335	.....	{ <a href="#">fluorinated</a> }
D06M 15/347	...	of unsaturated ethers, acetals, hemiacetals, ketones or aldehydes
D06M 15/353	....	containing fluorine
D06M 15/356	...	of other unsaturated compounds containing nitrogen, sulfur, silicon or phosphorus atoms
D06M 15/3562	....	{ <a href="#">containing nitrogen</a> }
D06M 15/3564	....	{ <a href="#">containing phosphorus</a> }
D06M 15/3566	....	{ <a href="#">containing sulfur</a> }
D06M 15/3568	....	{ <a href="#">containing silicon</a> }
D06M 15/37	..	Macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds
D06M 15/39	...	Aldehyde resins; Ketone resins; Polyacetals
D06M 15/41	....	Phenol-aldehyde or phenol-ketone resins
D06M 15/412	.....	{ <a href="#">sulfonated</a> }
D06M 15/415	.....	modified by compounds containing phosphorus
D06M 15/423	....	Amino-aldehyde resins
D06M 15/427	.....	modified by alkoxyated compounds or alkylene oxides
D06M 15/429	.....	modified by compounds containing sulfur
D06M 15/43	.....	modified by phosphorus compounds
D06M 15/431	.....	by phosphines or phosphine oxides; by oxides or salts of the phosphonium radical
D06M 15/432	.....	by phosphonic acids or derivatives thereof
D06M 15/433	.....	by phosphoric acids
D06M 15/437	.....	containing fluorine

D06M 15/45	.....	Use of special catalysts
D06M 15/507	...	Polyesters
D06M 15/5075	....	{containing sulfonic groups }
D06M 15/51	....	Unsaturated polymerisable polyesters
D06M 15/513	....	Polycarbonates
D06M 15/53	...	Polyethers ( <a href="#">polyacetals D06M 15/39</a> )
D06M 15/55	...	Epoxy resins
D06M 15/555	....	modified by compounds containing phosphorus
D06M 15/564	...	Polyureas, polyurethanes or other polymers having ureide or urethane links; Precondensation products forming them
D06M 15/568	....	Reaction products of isocyanates with polyethers
D06M 15/572	....	Reaction products of isocyanates with polyesters or polyesteramides
D06M 15/576	....	containing fluorine
D06M 15/579	....	modified by compounds containing phosphorus
D06M 15/59	...	Polyamides; Polyimides
D06M 15/592	....	made from polymerised unsaturated fatty acids and polyamines
D06M 15/595	....	Derivatives obtained by substitution of a hydrogen atom of the carboxamide radical
D06M 15/598	....	modified by compounds containing phosphorus
D06M 15/61	...	Polyamines {polyimines }
D06M 15/63	...	containing sulfur in the main chain, e.g. polysulfones
D06M 15/643	...	containing silicon in the main chain
D06M 15/6433	....	{containing carboxylic groups }
D06M 15/6436	....	{containing amino groups }
D06M 15/647	....	containing polyether sequences
D06M 15/65	....	containing epoxy groups
D06M 15/651	.....	{comprising carboxylic groups }
D06M 15/652	.....	{comprising amino groups }
D06M 15/653	....	modified by isocyanate compounds
D06M 15/657	....	containing fluorine
D06M 15/667	...	containing phosphorus in the main chain { ( <a href="#">inorganic polyphosphates D06M 11/72</a> ) }
D06M 15/673	....	containing phosphorus and nitrogen in the main chain
D06M 15/687	...	containing atoms other than phosphorus, silicon, sulfur, nitrogen, oxygen or carbon in the main chain
D06M 15/693	.	with natural or synthetic rubber, or derivatives thereof
D06M 15/70	.	combined with mechanical treatment ( <a href="#">decorating textiles D06Q</a> )
D06M 15/705	..	Embossing; Calendering; Pressing ( <a href="#">moulding D06M 23/14</a> )
D06M 15/71	..	Cooling; Steaming or heating, e.g. in fluidised beds; with molten metals
D06M 15/715	..	Suction; Vacuum treatment; Degassing; Blowing
D06M 16/00		<b>Biochemical treatment of fibres, threads, yarns, fabrics or fibrous goods made from such materials, e.g. enzymatic</b>

D06M 16/003 . { with enzymes or micro-organisms }

D06M 16/006 . {with wool-protecting agents; with anti-moth agents }

## **D06M 17/00 Producing multi-layer textile fabrics**

D06M 17/02 . by applying cellulose derivatives as adhesives

D06M 17/04 . by applying synthetic resins as adhesives

D06M 17/06 . . Polymers of vinyl compounds

D06M 17/08 . . Polyamides {polyimides }

D06M 17/10 . . Polyurethanes {polyurea }

## **D06M 19/00 Treatment of feathers**

## **D06M 23/00 Treatment of fibres, threads, yarns, fabrics or fibrous goods made from such materials, characterised by the process**

D06M 23/005 . {Applying monomolecular films on textile products like fibres, threads or fabrics }

D06M 23/02 . Processes in which the treating agent is releasably affixed or incorporated into a dispensing means

D06M 23/04 . Processes in which the treating agent is applied in the form of a foam

D06M 23/06 . Processes in which the treating agent is dispersed in a gas, e.g. aerosols (aerosol compositions [C09K 3/30](#))

D06M 23/08 . Processes in which the treating agent is applied in powder or granular form (adhesives for multi-layer textile fabrics [D06M 17/00](#); decorating textiles [D06Q](#) )

D06M 23/10 . Processes in which the treating agent is dissolved or dispersed in organic solvents; Processes for the recovery of organic solvents thereof

D06M 23/105 . . {Processes in which the solvent is in a supercritical state }

D06M 23/12 . Processes in which the treating agent is incorporated in micro capsules (making microcapsules [B01J 13/02](#))

D06M 23/14 . Processes for the fixation or treatment of textile materials in three-dimensional forms

D06M 23/16 . Processes for the non-uniform application of treating agents, e.g. one-sided treatment; Differential treatment (decorating textiles [D06Q](#) )

D06M 23/18 . . for the chemical treatment of borders of fabrics or knittings; for the thermal or chemical fixation of cuttings, seams or fibre ends

### **Guidance heading:**

## **D06M 2101/00 Chemical constitution of the fibres, threads, yarns, fabrics or fibrous goods made from such materials, to be treated**

**NOTE**

This subclass constitutes an internal scheme for indexing only.

The indexing codes relate to the fibres to be treated and are to be used with the groups [D06M 11/00](#), [D06M 13/00](#), [D06M 15/00](#), [D06M 16/00](#) and [D06M 23/00](#) Examples:

- the swelling of cellulose with alkaline hydroxides is classified and indexed in [D06M 11/38](#) // [D06M 2101/06](#)
- the treatment of cellulose with amines is classified and indexed in [D06M 13/325](#) // [D06M 2101/06](#)
- the treatment of polyester fibres with polyester is classified and indexed in [D06M 15/507](#) // [D06M 2101/32](#)
- the treatment of wool with pepsin is classified and indexed in [D06M 16/00](#) // [D06M 2101/12](#)
- the treatment of cellulose with silicon tetrachloride in the form of a foam is classified and indexed in [D06M 11/78](#), [D06M 23/04](#) // [D06M 2101/06](#).

[D06M 2101/005](#) . Asbestos fibres

**NOTE**

Blends of fibres are indexed according to each constituent fibre

- |                              |   |
|------------------------------|---|
| <a href="#">D06M 2101/02</a> | . Natural fibres, other than mineral fibres   |
| <a href="#">D06M 2101/04</a> | .. Vegetal fibres   |
| <a href="#">D06M 2101/06</a> | ... cellulosic  |
| <a href="#">D06M 2101/08</a> | .... Esters or ethers of cellulose  |
| <a href="#">D06M 2101/10</a> | .. Animal fibres  |
| <a href="#">D06M 2101/12</a> | ... Keratin fibres or silk  |
| <a href="#">D06M 2101/14</a> | ... Collagen fibres   |
| <a href="#">D06M 2101/16</a> | . Synthetic fibres, other than mineral fibres   |
| <a href="#">D06M 2101/18</a> | .. Synthetic fibres consisting of macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds                  |
| <a href="#">D06M 2101/20</a> | ... Polyalkenes, polymers or copolymers of compounds with alkenyl groups bonded to aromatic groups  |
| <a href="#">D06M 2101/22</a> | ... Polymers or copolymers of halogenated mono-olefins  |
| <a href="#">D06M 2101/24</a> | ... Polymers or copolymers of alkenylalcohols or esters thereof; Polymers or copolymers of alkenylethers, acetals or ketones                        |
| <a href="#">D06M 2101/26</a> | ... Polymers or copolymers of unsaturated carboxylic acids or derivatives thereof   |
| <a href="#">D06M 2101/28</a> | .... Acrylonitrile; Methacrylonitrile   |
| <a href="#">D06M 2101/30</a> | .. Synthetic polymers consisting of macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds |

D06M 2101/32	...	Polyesters
D06M 2101/34	...	Polyamides
D06M 2101/36	....	Aromatic polyamides
D06M 2101/38	...	Polyurethanes
D06M 2101/40	.	Fibres of carbon

**Guidance heading:****D06M 2200/00      Functionality of the treatment composition and/or properties imparted to the textile material**

D06M 2200/01	.	Stain or soil resistance
D06M 2200/05	.	Lotus effect
D06M 2200/10	.	Repellency against liquids
D06M 2200/11	..	Oleophobic properties
D06M 2200/12	..	Hydrophobic properties
D06M 2200/20	.	Treatment influencing the crease behaviour, the wrinkle resistance, the crease recovery or the ironing ease
D06M 2200/25	.	Resistance to light or sun, i.e. protection of the textile itself as well as UV shielding materials or treatment compositions therefor; Anti-yellowing treatments
D06M 2200/30	.	Flame or heat resistance, fire retardancy properties
D06M 2200/35	.	Abrasion, pilling or fibrillation resistance
D06M 2200/40	.	Reduced friction resistance, lubricant properties; Sizing compositions
D06M 2200/45	.	Shrinking resistance, anti-felting properties
D06M 2200/50	.	Modified hand or grip properties; Softening compositions

**D06M 2400/00      Specific information on the treatment or the process itself not provided in [D06M 23/00-D06M 23/18](#)**

D06M 2400/01	.	Creating covalent bondings between the treating agent and the fibre
D06M 2400/02	.	Treating compositions in the form of solgel or aerogel