CPC

COOPERATIVE PATENT CLASSIFICATION

C

CHEMISTRY; METALLURGY

(NOTES omitted)

CHEMISTRY

C11

ANIMAL OR VEGETABLE OILS, FATS, FATTY SUBSTANCES OR WAXES; FATTY ACIDS THEREFROM; DETERGENTS; CANDLES

C11D

DETERGENT COMPOSITIONS (preparations specially adapted for washing the hair A61Q 5/02, A61K 8/00; methods or apparatus for disinfection or sterilisation A61L; special washing compositions for cleaning semi-permeable membranes B01D 65/06); USE OF SINGLE SUBSTANCES AS DETERGENTS; SOAP OR SOAP-MAKING; RESIN SOAPS; RECOVERY OF GLYCEROL

NOTE

Documents classified in groups C11D 1/37, C11D 1/645 - C11D 1/655, C11D 1/825 - C11D 1/86, C11D 1/94 - C11D 1/945 and C11D 10/00 - C11D 10/047, are indexed using codes chosen from C11D 1/00 - C11D 1/92 to provide information on the individual ingredients on the compositions

WARNINGS

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

   - C11D 1/68 covered by C11D 3/2003
   - C11D 1/70 covered by C11D 3/2003
   - C11D 3/44 covered by C11D 3/43
   - C11D 3/60 covered by C11D 3/00
   - C11D 7/18 covered by C11D 3/39
   - C11D 7/38 covered by C11D 3/39
   - C11D 7/42 covered by C11D 3/386
   - C11D 7/52 covered by C11D 7/50
   - C11D 7/54 covered by C11D 3/395
   - C11D 7/56 covered by C11D 3/395
   - C11D 7/60 covered by C11D 7/00
   - C11D 9/50 covered by C11D 3/48
   - C11D 9/60 covered by C11D 9/00
   - C11D 10/02 covered by C11D 3/00
   - C11D 10/06 covered by C11D 9/00

2. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

1/00 Detergent compositions based essentially on surface-active compounds; Use of these compounds as a detergent

NOTE

In groups C11D 1/02 - C11D 1/94, in the absence of an indication to the contrary, a compound is classified in the last appropriate place.

1/008 . . . {Polymeric surface-active agents (see C11D 1/48, C11D 1/662, C11D 1/76)}

1/02 . . . Anionic compounds {](C11D 1/002, C11D 1/004, C11D 1/008 take precedence)}

1/04 . . . Carboxylic acids or salts thereof {see also C11D 9/005}

1/06 . . . Ether- or thioether carboxylic acids

1/08 . . . Polycarboxylic acids containing no nitrogen or sulfur

1/10 . . . Amino-carboxylic acids; Imino-carboxylic acids; Fatty acid condensates thereof {betaines C11D 1/90}

1/12 . . . Sulfonic acids or sulfuric acid esters; Salts thereof

1/123 . . . {derived from carboxylic acids, e.g. sulfosuccinates (from fatty acids see C11D 1/28)}

1/126 . . . {Acylisethionates}
CPC - 2020.08

1/14 . . . derived from aliphatic hydrocarbons or mono-
alcohols
1/143 . . . [Sulfinic acid esters]
1/146 . . . [Sulfuric acid esters]
1/16 . . . derived from divalent or polyvalent alcohols
1/18 . . . derived from amino alcohols
1/20 . . . Fatty acid condensates
1/22 . . . derived from aromatic compounds
1/24 . . . containing ester or ether groups directly
attached to the nucleus
1/26 . . . derived from heterocyclic compounds
1/28 . . . Sulfonation products derived from fatty acids
or their derivatives, e.g., esters, amides
1/29 . . . Sulfates of polyoxyalkylene ethers
1/30 . . . Sulfonation products derived from lignin
1/32 . . . Protein hydrolysates; Fatty acid condensates
thereof
1/34 . . . Derivatives of acids of phosphorus
1/342 . . . [Phosphonates; Phosphinates; Phosphonites]
1/345 . . . [Phosphates; Phosphites]
1/347 . . . [Other P-containing anionic compounds
(C11D 1/006, C11D 1/34 take precedence)]
1/36 . . . of unknown constitution [, e.g. natural products]
1/37 . . . Mixtures of compounds all of which are anionic
1/38 . . . Cationic compounds (C11D 1/002, C11D 1/004,
C11D 1/008 take precedence)]
1/385 . . . [Cationic compounds containing P (phosphonium
compounds C11D 1/60)]
1/40 . . . Monoamines or polamines; Salts thereof
1/42 . . . Amino alcohols or amino ethers
1/44 . . . Esters of polyoxyalkylene ethers with amino
alcohols; Condensation products of
epoxyalkanes with amines
1/46 . . . Esters of carboxylic acids with amino alcohols;
Esters of amino carboxylic acids with alcohols
1/48 . . . N-containing polycondensation products
1/50 . . . Derivatives of urea, thiourea, cyanamide,
guanidine or urethanes
1/52 . . . Carboxylic amides, alkylolamides or imides [(or
their condensation products with alkylene oxides]
1/521 . . . [Carboxylic amides (R₁-CO-NR₂R₃), where R₁,
R₂ and R₃ are alkyl or alkanyl groups]
1/523 . . . [Carboxylic alkylolamides, or dialkylolamides,
or hydroxycarboxylic amides (R₂-CO-NR₂R₃),
where R₂, R₃ or R₄ contain one hydroxy group
per alkyl group]
1/525 . . . [Carboxylic amides (R₁-CO-NR₂R₃), where R₁,
R₂ or R₃ contain two or more hydroxy groups
per alkyl group, e.g. R₁ being a reducing sugar
rest]
1/526 . . . [Carboxylic amides (R₁-CO-NR₂R₃), where R₁,
R₂ or R₃ are polyalkylated]
1/528 . . . [Carboxylic amides (R₁-CO-NR₂R₃), where
at least one of the chains R₁, R₂ or R₃ is
interrupted by a functional group, e.g. a
-NH-, -NR-, -CO-, or -CON- group (ethers
C11D 1/526)]
1/54 . . . Hydrazides of carboxylic acids
1/56 . . . containing nitro or nitroso groups
1/58 . . . Heterocyclic compounds
1/60 . . . Sulfonium or phosphonium compounds
1/62 . . . Quaternary ammonium compounds
1/64 . . . of unknown constitution [, e.g. natural products]
1/645 . . . Mixtures of compounds all of which are cationic
1/65 . . . Mixtures of anionic with cationic compounds
1/652 . . . [Mixtures of anionic compounds with
carboxylic amides or alkylol amides]
1/655 . . . Mixtures of sulfonated products with
alkylolamides of carboxylic acids
1/66 . . . Non-ionic compounds (C11D 1/002, C11D 1/004,
C11D 1/008 take precedence)]
1/662 . . . [Carbohydrates or derivatives]
1/665 . . . [Arsine oxides]
1/667 . . . [Neutral esters, e.g. sorbitan esters; see also
C11D 1/74 and C11D 1/78]
1/72 . . . Ethers of polyoxyalkylene glycols
1/721 . . . [End blocked ethers]
1/722 . . . Ethers of polyoxyalkylene glycols having mixed
oxyalkylene groups; [Polyalkylated fatty
alcohols or polyalkoxylated alkylaryl alcohols
with mixed oxyalkylene groups (C11D 1/721
takes precedence)]
1/74 . . . Carboxylates or sulfonates [esters] of
polyoxyalkylene glycols
1/75 . . . Amino oxides
1/755 . . . Sulfoxides
1/76 . . . Synthetic resins containing no nitrogen
1/78 . . . Neutral esters of acids of phosphorus
1/79 . . . Phosphine oxides
1/80 . . . Derivatives of lignin containing no sulfo- or
sulfate groups
1/82 . . . Compounds containing silicon
1/825 . . . Mixtures of compounds all of which are non-ionic
1/8255 . . . [containing a combination of compounds
differently alcoxylised or with differently
alkylated chains]
1/83 . . . Mixtures of non-ionic with anionic compounds
1/8305 . . . [containing a combination of non-ionic
compounds differently alcoxylised or with
different alkylated chains]
1/831 . . . of sulfonates with ethers of polyoxyalkylene
without phosphates
1/835 . . . Mixtures of non-ionic with cationic compounds
1/8355 . . . [containing a combination of non-ionic
compounds differently alcoxylised or with
different alkylated chains]
1/86 . . . [Ternary] Mixtures of anionic, cationic, and non-
ionic compounds
1/88 . . . Ampholytes; Electroneutral compounds
(C11D 1/002, C11D 1/004, C11D 1/008 take
precedence)]
1/883 . . . [Aminimide (= ammonioamidates)]
1/886 . . . [Ampholytes containing P]
1/90 . . . Betaines
1/92 . . . Sulfoamides [Sulfamides]
1/94 . . . Mixtures with anionic, cationic, or non-ionic
compounds
1/945 . . . [containing a combination of non-ionic
compounds differently alcoxylised or with
different alkylated chains]
Other compounding ingredients of detergent compositions covered in group C11D 3/00

NOTE
Documents classified in group C11D 3/0005 are also classified in other groups of subclass C11D according to the chemical nature of the compounds as such

NOTE
In groups C11D 3/02 - C11D 3/39, in the absence of an indication to the contrary, a compound is classified in the last appropriate place.

NOTE
From October 2008 onwards, the following subgroups of C11D 3/06 are no longer used for the classification of new documents:

WARNING
From October 2008 onwards, the following subgroups of C11D 3/06 are no longer used for the classification of new documents:

3/00 . . . {Other compounding ingredients characterised by their effect}
3/001 . . . {Softening compositions}
3/0015 . . . {liquid}
3/0021 . . . {Dye-stain or dye-transfer inhibiting compositions}
3/0026 . . . {Low foaming or foam regulating compositions}
3/0031 . . . {Carpet, upholstery, fur, and leather cleansers}
3/0036 . . . {Soil deposition preventing compositions; Antiredeposition agents}
3/0042 . . . {Reducing agents}
3/0047 . . . {pH regulated compositions}
3/0052 . . . {Gas evolving or heat producing compositions}
3/0057 . . . {Oven-cleaning compositions}
3/0063 . . . {Photo-activating compounds}
3/0068 . . . {Deodorant compositions}
3/0073 . . . {Anticorrosion compositions}
3/0078 . . . {Compositions for cleaning contact lenses, spectacles, lenses (disinfecting contact lenses A61L 2/00; mechanical cleaning G02C 13/00)}

3/0084 . . . {Antioxidants; Free-radical scavengers}
3/0089 . . . {Pearlescent compositions; Opacifying agents}
3/0094 . . . {High foaming compositions}
3/02 . . . Inorganic compounds []; Elemental compounds]
3/04 . . . Water-soluble compounds
3/042 . . . {Acids}
3/044 . . . {Hydroxides, bases}
3/046 . . . {Salts}
3/048 . . . {Nitrates, nitriles}
3/06 . . . Phosphates, including polyphosphates

3/1213 . . . {Oxides, hydroxides, e.g. Al₂O₃, TiO₂, CaO, Ca(OH)₂}
3/122 . . . {Sulfur-containing, e.g. sulfates, sulfites, gypsum}
3/1226 . . . {Phosphorus containing}
3/1233 . . . {Carbonates, e.g. calcite, dolomite}
3/124 . . . {Silicon containing, e.g. silica, silex, quartz, glass beads}
3/1246 . . . {Silicates, e.g. diatomaceous earth}
3/1253 . . . {Layer silicates, e.g. talcum, kaolin, clay, bentonite, smectite, montmorillonite, hectorite, attapulgite}
3/126 . . . {in solid compositions}
3/1266 . . . {in liquid compositions}
3/1273 . . . {Crystalline layered silicates of type Na₅M₀₆Si₃₄O₁₁₀(OH)₂}
3/128 . . . {Aluminium silicates, e.g. zeolites (C11D 3/1253 takes precedence)}
3/1286 . . . {Stabilised aqueous aluminosilicate suspensions}
3/1293 . . . {Feldspar, Perlite; Pumice; Portland cement}
3/14 . . . Fillers; Abrasives; {Abrasive compositions; Suspending or absorbing agents not provided for in one single group of C11D 3/12}; Specific features concerning abrasives, e.g. granulometry, mixtures (dyes, pigments C11D 3/40)
3/16 . . . Organic compounds
3/162 . . . {containing Si}
3/164 . . . {containing a carbon-carbon triple bond}
3/166 . . . {containing borium}
3/168 . . . {Organometallic compounds or organometallic complexes}
3/18 . . . Hydrocarbons (C11D 3/164 takes precedence)
3/181 . . . [linear]
3/182 . . . [branched]
3/184 . . . [unsaturated]
3/185 . . . [cyclic]
3/187 . . . [aromatic]
3/188 . . . [Terpenes]
3/2003 . . . [Alcohols; Phenols]

NOTES
1. In this group glucerol is not taken into account for applying the last place rule, when present in a mixture of alcohols or as an alternative from a series of alcohols

3/2006 . . . {Monohydric alcohols}
3/201 . . . [linear]
3/2013 . . . [fatty or with at least 8 carbon atoms in the alkyl chain]
3/2017 . . . [branched]
3/202 . . . [fatty or with at least 8 carbon atoms in the alkyl chain]
1. In this group in the absence of an indication to the contrary sulfur containing compounds are classified in the last appropriate place (see Note before group C11D 3/00) and indexed for the individual functional groups using codes chosen from C11D 3/349 - C11D 3/349.

2. In case of mixtures or a list of alternatives or Markush formulae each individual compound is classified and indexed according to Note 1.

NOTES
In the absence of an indication to the contrary, in groups C11D 7/02 - C11D 7/46 a compound is classified in the last appropriate place.

Inorganic compounds

Water-soluble compounds

Hydroxides

Acids

Salts

Nitrites; Nitrates

Carbonates; bicarbonates

Silicates

Phosphates including polyphosphates

Water-insoluble oxides

Organic compounds

Hydrocarbons

Linear compounds

Unsaturated compounds

Cyclic compounds

Aromatic compounds

Terpenes

Containing oxygen

Alcohols; Phenols

Fatty or with at least 8 carbon atoms in the alkyl or alkenyl chain

Ethers

Dihydroxyethers; Ketones; Acetals; Ketals

Carboxylic acids; Salts thereof

Esters; Carbonates

Heterocyclic compounds

Carbohydrates; Derivatives thereof

Containing halogen
Non-surface-active compounds

7/30 . . . Halogenated hydrocarbons
7/32 . . . containing nitrogen
7/3209 . . . [Amines or imines with one to four nitrogen atoms; Quaternized amines]
7/3218 . . . [Alkanolamines; Alkanolimines]
7/3227 . . . [Ethers thereof]
7/3236 . . . [Aldehydes, ketones, acetals, ketals thereof]
7/3245 . . . [Aminocarboxylic acids]
7/3254 . . . [Esters or carbonates thereof]
7/3263 . . . [Amides; Imides]
7/3272 . . . [Urea; Guanidine; Derivatives thereof]
7/3281 . . . [Heterocyclic compounds thereof]
7/329 . . . [Carbohydrate, derivatives thereof]
7/34 . . . containing sulfur
7/36 . . . containing phosphorus
7/40 . . . Products in which the composition is not well defined
7/44 . . . Vegetable products
7/46 . . . Animal products
7/50 . . . Solvents
7/5004 . . . [Organic solvents]

**NOTE**

In this group, classification is made in the first appropriate place.

7/5009 . . . [containing phosphorus, sulfur or silicon, e.g. dimethylsulfoxide]
7/5013 . . . [containing nitrogen]
7/5018 . . . [Halogenated solvents]
7/5022 . . . [containing oxygen]
7/5027 . . . [Hydrocarbons]
7/5031 . . . [Azeotropic mixtures of non-halogenated solvents]
7/5036 . . . [Azeotropic mixtures containing halogenated solvents]
7/504 . . . [all solvents being halogenated hydrocarbons]
7/5045 . . . [Mixtures of (hydro)chlorofluorocarbons]
7/505 . . . [Mixtures of (hydro)fluorocarbons]
7/5054 . . . [Mixtures of (hydro)chlorofluorocarbons and (hydro)fluorocarbons]
7/5059 . . . [Mixtures containing (hydro)chlorofluorocarbons]
7/5063 . . . [Halogenated hydrocarbons containing heteroatoms, e.g. fluoro alcohols]
7/5068 . . . [Mixtures of halogenated and non-halogenated solvents]
7/5072 . . . [Mixtures of only hydrocarbons]
7/5077 . . . [Mixtures of only oxygen-containing solvents]
7/5081 . . . [the oxygen-containing solvents being alcohols only]
7/5086 . . . [the oxygen-containing solvents being different from alcohols, e.g. mixtures of water and ethers]
7/509 . . . [Mixtures of hydrocarbons and oxygen-containing solvents]
7/5095 . . . [Mixtures including solvents containing other heteroatoms than oxygen, e.g. nitriles, amides, nitroalkanes, siloxanes, thioethers]

**Soap detergents**

9/00 Compositions of detergents based essentially on soap (compositions containing resin soap)

9/002 . . . [Non alkali-metal soaps]
9/005 . . . [Synthetic soaps (see also C11D 1/04)]
9/007 . . . [Soaps or soap mixtures with well defined chain length]
9/02 . . . on alkali or ammonium soaps
9/04 . . . containing compounding ingredients other than soaps
9/045 . . . [containing substances which prevent the deterioration of soaps, e.g. light or heat stabilisers, antioxidants]

**NOTE**

In groups C11D 9/06 - C11D 9/42, in the absence of an indication to the contrary, a compound is classified in the last appropriate place.

9/06 . . . Inorganic compounds
9/08 . . . Water-soluble compounds
9/10 . . . Salts
9/12 . . . Carbonates
9/14 . . . Phosphates; Polyphosphates
9/16 . . . Borates
9/18 . . . Water-insoluble compounds
9/20 . . . Fillers, abrasives
9/22 . . . Organic compounds, e.g. vitamins
9/225 . . . [Polymers]
9/24 . . . Hydrocarbons ([C11D 9/225 takes precedence])
9/26 . . . containing oxygen ([C11D 9/225 takes precedence])
9/262 . . . [containing carbohydrates]
9/265 . . . [containing glycerol]
9/267 . . . [containing free fatty acids (see also C11D 9/48)]
9/28 . . . containing halogen ([C11D 9/225 takes precedence])
9/30 . . . containing nitrogen ([C11D 9/225 takes precedence])
9/32 . . . containing sulfur ([C11D 9/225 takes precedence])
9/34 . . . containing phosphorus ([C11D 9/225 takes precedence])
9/36 . . . containing silicon ([C11D 9/225 takes precedence])
9/38 . . . Products in which the composition is not well defined
9/40 . . . Proteins
9/42 . . . Per-compounds
9/44 . . . Perfumes; Colouring materials; Brightening agents [Bleaching agents]
9/442 . . . [Perfumes]
9/444 . . . [Dyes; Pigments]
9/446 . . . [Bleaching agents]
9/448 . . . [Brightening agents]
9/48 . . . Superfatting agents

10/00 Compositions of detergents, not provided for by one single preceding group
Soap detergents

10/04 . based on mixtures of surface-active non-soap compounds and soap
10/042 . [based on anionic surface-active compounds and soap]
10/045 . [based on non-ionic surface-active compounds and soap]
10/047 . [based on cationic surface-active compounds and soap]

11/00 Special methods for preparing compositions containing mixtures of detergents { (in the form of blocks, bars, tablets C11D 17/0047); Methods for making the contents of patent claims more explicit)

11/0005 . (Special cleaning and washing methods)
11/0011 . . characterised by the objects to be cleaned
11/0017 . . ['Soft' surfaces, e.g. textiles]
11/0023 . . ['Hard' surfaces]
11/0029 . . {Metals (degreasing metals C23G 5/00)}
11/0035 . . [Glass; Plastics]
11/0041 . . {Industrial or commercial equipment, e.g. reactors, tubes, engines (C11D 11/0047 takes precedence)}
11/0047 . . {Electronic devices, e.g. PCBs, semiconductors}
11/0052 . . [Mineral surfaces, e.g. stones, frescoes, plaster, walls, concrete]
11/0058 . . [involving the application of foam or a temporary coating on the surface to be cleaned]
11/0064 . . [Multi-step methods]
11/007 . . [involving applying energy, e.g. irradiation]
11/0076 . . [Regeneration of cleaning solutions]
11/0082 . . [one or more of the detergent ingredients being in a liquefied state, e.g. slurry, paste, melt, and the process resulting in solid detergent particles such as granules, powders or beads]
11/0088 . . [the liquefied ingredients being sprayed or adsorbed onto solid particles]
11/0094 . . {Process for making liquid detergent compositions, e.g. slurries, pastes, gels}
11/02 . Preparation in the form of powder by spray drying
11/04 . by chemical means, e.g. by sulfonating in the presence of other compounding ingredients
followed by neutralising

Soap or soap-making: Resin soaps

13/00 Making of soap or soap solutions in general; Apparatus therefor (resin soap C11D 15/000)

13/02 . Boiling soap; Refining
13/04 . Continuous methods therefor
13/06 . Bleaching of soap or soap solutions
13/08 . Colouring, [e.g. striated bars, striped bars] or perfuming
13/10 . Mixing; Kneading
13/12 . Cooling (C11D 13/14 takes precedence)
13/14 . Shaping
13/16 . in moulds
13/18 . by extrusion or pressing
13/20 . in the form of small particles, e.g. powder, flakes (by slicing C11D 13/24)
13/22 . Cutting
13/24 . Slicing soap on the cooling drum
13/26 . Drying (drying ovens E27)
13/28 . Embossing; Polishing

15/00 Manufacture of resin soap or soaps derived from naphthenic acids; Compositions

15/02 . Apparatus therefor
15/04 . Compositions containing resin soap or soap derived from naphthenic acids

17/00 Detergent materials characterised by their shape or physical properties ((soaps C11D 9/00, shaping soap C11D 13/00))

17/0004 . [Non aqueous liquid compositions comprising insoluble particles]
17/0013 . . [Liquid compositions with insoluble particles in suspension (C11D 17/0021, C11D 17/0026, C11D 17/003 take precedence)]
17/0017 . . [Multi-phase liquid compositions]
17/0021 . . . [Aqueous microemulsions]
17/0026 . . . [Structured liquid compositions, e.g. liquid crystalline phases, network containing non-Newtonian phase, (thixotropic solutions C11D 17/003)]
17/0003 . . . [Colloidal solutions, e.g. gels; Thixotropic solutions; Pastes]
17/0034 . . . [Fixed on a solid conventional detergent ingredient]
17/0039 . . . [Coated compositions or coated components in the compositions, (micro)capsules]
17/0043 . . . [For use with aerosol devices]
17/0047 . . . [Detergents in the form of bars or tablets]
17/0052 . . . [Cast detergent compositions]
17/0056 . . . [Lavatory cleansing blocks]
17/006 . . . [containing mainly surfactants, but no builders, e.g. syndet bar]
17/0065 . . . [Solid detergents containing builders (C11D 17/06 takes precedence)]
17/0069 . . . [Laundry bars]
17/0073 . . . [Tablets]
17/0078 . . . . [Multilayered tablets]
17/0082 . . . . [Coated tablets]
17/0086 . . . . [Laundry tablets]
17/0091 . . . . [Dishwashing tablets]
17/0095 . . . . [Solid transparent soaps or detergents]
17/02 . . Floating bodies of detergents [or of soaps]
17/04 . . combined with or containing other objects
17/041 . . . . [Compositions releasably affixed on a substrate or incorporated into a dispensing means]
17/042 . . . . . [Water soluble or water disintegrable containers or substrates containing cleaning compositions or additives for cleaning compositions (packaging of disintegrable, dissolvable or edible materials B65D 65/46)]
17/043 . . . . . [Liquid or thixotropic (gel) compositions]
17/044 . . . . . [Solid compositions]
17/045 . . . . . [Multi-compartment]
17/046 . . . . . [Insoluble free body dispenser]
17/047 . . . . . [Arrangements specially adapted for dry cleaning or laundry dryer related applications]
17/048 . . . . . [Soap or detergent bars or cakes with an inner core consisting of insoluble material (floating soaps C11D 17/02)]
17/049 . . . . . [Cleaning or scouring pads; Wipes]
17/06  Powder; flakes; free-flowing mixtures; sheets
17/065 (High-density particulate detergent compositions)
17/08  Liquid soap, [e.g. for dispensers]; capsuled

19/00 Recovery of glycerol from a saponification liquor
(refining glycerol C07C 31/22)