

CPC COOPERATIVE PATENT CLASSIFICATION

C CHEMISTRY; METALLURGY

(NOTES omitted)

CHEMISTRY

C11 ANIMAL AND VEGETABLE OILS, FATS, FATTY SUBSTANCES AND WAXES; FATTY ACIDS THEREFROM; DETERGENTS; CANDLES (edible oil or fat compositions [A23](#))

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

WARNING

The following IPC groups are not used in the CPC system. Subject matter covered by these 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 3/46	covered by	C11D 3/2079 , C11D 9/48
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 9/20	covered by partly covered by	C11D 9/444
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

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.

- 1/002 . {Surface-active compounds containing sulfur (SO_3 and SO_4 , [C11D 1/12](#); sulfonium compounds [C11D 1/60](#); sulfoxides [C11D 1/755](#); sulfobetaines [C11D 1/92](#))}
- 1/004 . {Surface-active compounds containing F}
- 1/006 . . {Surface-active compounds containing fluorine and phosphorus}

- 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 . . . {Acyliethionates}
- 1/14 . . . derived from aliphatic hydrocarbons or mono-alcohols
- 1/143 . . . {Sulfonic 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 polyamines; Salts thereof
- 1/42 . . Amino alcohols or amino ethers
- 1/44 . . . Ethers of polyoxyalkylenes 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}
- WARNING**
- Until September 2008, when classification was made, group C11D 3/07 took precedence over group C11D 1/52
- 1/521 . . . {Carboxylic amides (R^1 -CO-NR²R³), where R¹, R² and R³ are alkyl or alkenyl groups}
- 1/523 . . . {Carboxylic alkylolamides, or dialkylolamides, or hydroxycarboxylic amides (R^1 -CO-NR²R³), where R¹, R² or R³ contain one hydroxy group per alkyl group}
- 1/525 . . . {Carboxylic amides (R^1 -CO-NR²R³), where R¹, R² or R³ contain two or more hydroxy groups per alkyl group, e.g. R³ being a reducing sugar rest}
- 1/526 . . . {Carboxylic amides (R^1 -CO-NR²R³), where R¹, R² or R³ are polyalkoxylated}
- 1/528 . . . {Carboxylic amides (R^1 -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
- WARNING**
- Until September 2008, when classification was made, group C11D 3/066 took precedence over group C11D 1/655
- 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
- WARNING**
- Until September 2008, when classification was made, group C11D 3/075 took precedence over group C11D 1/72
- 1/721 . . . {End blocked ethers}
- 1/722 . . Ethers of polyoxyalkylene glycols having mixed oxyalkylene groups; {Polyalkoxylated 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 polyoxyalkylenes 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 . . Sulfobetaines {Sulfitobetaines}
- 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}
- 3/00 Other compounding ingredients of detergent compositions covered in group C11D 1/00**
- 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
- 3/0005 . {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)}
- 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.
- 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, nitrites}

- 3/06 . . . Phosphates, including polyphosphates
- WARNING**
- From October 2008 onwards, the following subgroups of C11D 3/06 are no longer used for the classification of new documents
Groups C11D 3/065, C11D 3/066, C11D 3/07 and C11D 3/075
- 3/062 {Special methods concerning phosphates}
- 3/065 in admixture with sulfonated products
- 3/066 and with alkyloamides of carboxylic acids
- 3/07 in admixture with alkyloamides of carboxylic acids
- 3/075 in admixture with ethers of polyoxyalkylenes
- 3/08 . . . Silicates
- 3/10 . . . Carbonates {; Bicarbonates}
- 3/12 . . Water-insoluble compounds
- 3/1206 . . . {free metals, e.g. aluminium grit or flakes}
- 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 NaMeSixO_{2x+1}YH₂O}
- 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 orgometallic 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}
- 3/20 . . containing oxygen {(C11D 3/162, C11D 3/164, C11D 3/166, C11D 3/168 take precedence)}

3/2003	. . . {Alcohols; Phenols}	3/28	. . . Heterocyclic compounds containing nitrogen in the ring
	NOTES	3/30	. . . Amines; Substituted amines{; Quaternized amines}
	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	3/32	. . . Amides; Substituted amides
	2. In case of mixtures of alcohols or of a list of alternatives, documents are classified in C11D 3/2003 , C11D 3/2006 or C11D 3/2041 and indexed for the individual alternatives using codes chosen from C11D 3/2006 - C11D 3/2065	3/323	. . . . {urea or derivatives thereof}
3/2006	. . . . {Monohydric alcohols}	3/33	. . . Amino carboxylic acids
3/201	. . . . {linear}	3/34	. . containing sulfur {(C11D 3/162 , C11D 3/164 , C11D 3/166 , C11D 3/168 take precedence)}
3/2013	. . . . . {fatty or with at least 8 carbon atoms in the alkyl chain}		NOTES
3/2017	. . . . . {branched}		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 3/3409 - C11D 3/349
3/202	. . . . . {fatty or with at least 8 carbon atoms in the alkyl chain}		2. In case of mixtures or a list of alternatives or Markush formulae each individual compound is classified and indexed according to Note 1.
3/2024	. . . . . {cyclic; polycyclic}	3/3409	. . . {Alkyl -, alkenyl -, cycloalkyl - or terpene sulfates or sulfonates}
3/2027	. . . . . {unsaturated}	3/3418	. . . {Toluene -, xylene -, cumene -, benzene - or naphthalene sulfonates or sulfates}
3/2031	. . . . . {fatty or with at least 8 carbon atoms in the alkenyl chain}	3/3427	. . . {containing thiol, mercapto or sulfide groups, e.g. thioethers, mercaptals}
3/2034	. . . . . {aromatic}	3/3436	. . . {containing disulfide groups}
3/2037	. . . . . {Terpenes}	3/3445	. . . {containing sulfinio groups, e.g. dimethyl sulfoxide}
3/2041	. . . . {Dihydric alcohols}	3/3454	. . . {containing sulfone groups, e.g. vinyl sulfones}
3/2044	. . . . . {linear}	3/3463	. . . {containing thio sulfate or sulfite groups}
3/2048	. . . . . {branched}	3/3472	. . . {additionally containing -COOH groups or derivatives thereof}
3/2051	. . . . . {cyclic; polycyclic}	3/3481	. . . {containing sulfur in a heterocyclic ring, e.g. sultones, sulfolanes}
3/2055	. . . . . {unsaturated}	3/349	. . . {additionally containing nitrogen atoms, e.g. nitro, nitroso, amino, imino, nitrilo, nitrile groups containing compounds or their derivatives, thio urea}
3/2058	. . . . . {aromatic}	3/36	. . containing phosphorus {(C11D 3/162 , C11D 3/164 , C11D 3/166 , C11D 3/168 take precedence)}
3/2062	. . . . . {Terpene}	3/361	. . . {Phosphonates, phosphinates, phosphonites}
3/2065	. . . . {Polyhydric alcohols}	3/362	. . . {Phosphates, phosphites}
3/2068	. . . {Ethers}	3/364	. . . {containing nitrogen}
3/2072	. . . {Aldehydes-ketones}	3/365	. . . {containing carboxyl groups}
3/2075	. . . {Carboxylic acids-salts thereof}	3/367	. . . {containing halogen}
3/2079	. . . . {Monocarboxylic acids-salts thereof (soaps C11D 10/00 - C11D 10/04)}	3/368	. . . . {containing fluorine}
3/2082	. . . . {Polycarboxylic acids-salts thereof}	3/37	. . Polymers {(polymeric surface-active agents C11D 1/008 ; carbohydrates C11D 3/22)}
3/2086	. . . . {Hydroxy carboxylic acids-salts thereof}	3/3703	. . . {Macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}
3/2089	. . . . {Ether acids-salts thereof}	3/3707	. . . . {Polyethers, e.g. polyalkyleneoxides}
3/2093	. . . {Esters; Carbonates}	3/3711	. . . . {Polyacetal carboxylates}
3/2096	. . . {Heterocyclic compounds}	3/3715	. . . . {Polyesters; Polycarbonates}
3/22	. . . Carbohydrates or derivatives thereof {(graft polymers C11D 3/3788)}	3/3719	. . . . {Polyamides; Polyimides}
3/221	. . . . {Mono, di- or trisaccharides or derivatives thereof}	3/3723	. . . . {Polyamines, polyalkyleneimines}
3/222	. . . . {Natural or synthetic polysaccharides, e.g. cellulose, starch, gum, alginic acid, cyclodextrin}	3/3726	. . . . {Polyurethanes}
3/223	. . . . . {oxidised}	3/373	. . . . {containing silicones}
3/225	. . . . . {etherified, e.g. CMC}	3/3734	. . . . . {Cyclic silicones}
3/226	. . . . . {esterified}	3/3738	. . . . . {Alkoxyated silicones}
3/227	. . . . . {with nitrogen-containing groups}	3/3742	. . . . . {Nitrogen containing silicones}
3/228	. . . . . {with phosphorus- or sulfur-containing groups}		
3/24	. . containing halogen {(C11D 3/162 , C11D 3/164 , C11D 3/166 , C11D 3/168 take precedence)}		
3/245	. . . {containing fluorine}		
3/26	. . containing nitrogen {(C11D 3/162 , C11D 3/164 , C11D 3/166 , C11D 3/168 take precedence)}		

- 3/3746 . . . {Macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds}
- 3/3749 . . . {Polyolefins; Halogenated polyolefins; Natural or synthetic rubber; Polyarylolefins; Halogenated polyarylolefins}
- 3/3753 . . . {Polyvinylalcohol; Ethers or esters thereof}
- 3/3757 . . . {(Co)polymerised carboxylic acids, -anhydrides, -esters in solid and liquid compositions}
- 3/3761 . . . {in solid compositions}
- 3/3765 . . . {in liquid compositions}
- 3/3769 . . . {(Co)polymerised monomers containing nitrogen, e.g. carbonamides, nitriles, amines}
- 3/3773 . . . {in liquid compositions}
- 3/3776 . . . {Heterocyclic compounds, e.g. lactam}
- 3/378 . . . {(Co)polymerised monomers containing sulfur, e.g. sulfonate}
- 3/3784 . . . {(Co)polymerised monomers containing phosphorus}
- 3/3788 . . . {Graft polymers}
- 3/3792 . . . {Amine oxide containing polymers}
- 3/3796 . . . {Amphoteric polymers; Zwitterionic polymers}
- 3/38 . . Products with no well-defined composition{, e.g. natural products}
- 3/381 . . . {Microorganisms}
- 3/382 . . . Vegetable products, e.g. soya meal, wood flour, sawdust
- 3/384 . . . Animal products
- 3/3845 . . . {Antibodies}
- 3/386 . . . Preparations containing enzymes{, e.g. protease, amylase}
- 3/38609 . . . {Protease or amylase in solid compositions only}
- 3/38618 . . . {Protease or amylase in liquid compositions only}
- 3/38627 . . . {containing lipase}
- 3/38636 . . . {containing enzymes other than protease, amylase, lipase, cellulase, oxidase, reductase}
- 3/38645 . . . {containing cellulase}
- 3/38654 . . . {containing oxidase, reductase}
- 3/38663 . . . {Stabilised liquid enzyme compositions (chemically modified or immobilised enzymes [C11D 3/386](#), [C12N](#))}
- 3/38672 . . . {Granulated or coated enzymes}
- 3/38681 . . . {Chemically modified or immobilised enzymes}
- 3/3869 . . . {Enzyme enhancers or mediators}
- 3/39 . . Organic or inorganic per-compounds
- 3/3902 . . {combined with specific additives}
- 3/3905 . . {Bleach activators; Bleach catalysts}

NOTES

1. In the absence of an indication to the contrary activators or catalysts are classified in the last appropriate place
2. In case of mixtures or a list of alternatives documents are classified in [C11D 3/3905](#) or [C11D 3/3907](#) only and indexed for the individual alternatives using codes chosen from [C11D 3/3907](#) - [C11D 3/3932](#)

- 3/3907 . . . {Organic compounds}

- 3/391 . . . {Oxygen-containing compounds}
- 3/3912 . . . {derived from saccharides}
- 3/3915 . . . {Sulfur-containing compounds}
- 3/3917 . . . {Nitrogen-containing compounds}
- 3/392 . . . {Heterocyclic compounds, e.g. cyclic imides or lactames}
- 3/3922 . . . {Cyanamides}
- 3/3925 . . . {Nitriles; Isocyanates; Quarternary ammonium nitriles}
- 3/3927 . . . {Quarternary ammonium compounds ([quarternary ammonium nitriles C11D 3/3925](#))}
- 3/393 . . . {Phosphorus, boron- or silicium-containing compounds}
- 3/3932 . . . {Inorganic compounds or complexes}
- 3/3935 . . . {granulated, coated or protected}
- 3/3937 . . . {Stabilising agents}
- 3/394 . . . {Organic compounds}
- 3/3942 . . {Inorganic per-compounds ([C11D 3/3902](#) takes precedence)}
- 3/3945 . . {Organic per-compounds ([C11D 3/3902](#) takes precedence)}
- 3/3947 . . {Liquid compositions}
- 3/395 . . Bleaching agents {(per-compounds [C11D 3/39](#))}
- 3/3951 . . {combined with specific additives}
- 3/3953 . . {Inorganic bleaching agents ([C11D 3/3951](#) takes precedence)}
- 3/3955 . . {Organic bleaching agents ([C11D 3/3951](#) takes precedence)}
- 3/3956 . . {Liquid compositions}
- 3/3958 . . {combined with phosphates}
- 3/40 . . Dyes{; Pigments}
- 3/42 . . Brightening agents{; Blueing agents}
- 3/43 . . Solvents
- 3/48 . . Medical, disinfecting agents, disinfecting, antibacterial, germicidal or antimicrobial compositions
- 3/485 . . {Halophors, e.g. iodophors}
- 3/50 . . Perfumes
- 3/502 . . {Protected perfumes}
- 3/505 . . {encapsulated or adsorbed on a carrier, e.g. zeolite or clay}
- 3/507 . . {Compounds releasing perfumes by thermal or chemical activation}

Non-surface-active compounds**7/00 Compositions of detergents based essentially on non-surface-active compounds****NOTE**

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.

- 7/02 . . Inorganic compounds
- 7/04 . . Water-soluble compounds
- 7/06 . . . Hydroxides
- 7/08 . . . Acids
- 7/10 . . . Salts
- 7/105 . . . {Nitrates; Nitrites}
- 7/12 . . . Carbonates {bicarbonates}
- 7/14 . . . Silicates
- 7/16 . . . Phosphates including polyphosphates

- 7/20 . . Water-insoluble oxides
- 7/22 . Organic compounds
- 7/24 . . Hydrocarbons
- 7/241 . . . {linear}
- 7/242 . . . {branched}
- 7/244 . . . {unsaturated}
- 7/245 . . . {cyclic}
- 7/247 . . . {aromatic}
- 7/248 . . . {Terpenes}
- 7/26 . . containing oxygen
- 7/261 . . . {Alcohols; Phenols}
- 7/262 {fatty or with at least 8 carbon atoms in the alkyl or alkenyl chain}
- 7/263 . . . {Ethers}
- 7/264 . . . {Aldehydes; Ketones; Acetals; Ketals}
- 7/265 . . . {Carboxylic acids; Salts thereof}
- 7/266 . . . {Esters; Carbonates}
- 7/267 . . . {Heterocyclic compounds}
- 7/268 . . . {Carbohydrates; Derivatives thereof}
- 7/28 . . containing halogen
- 7/30 . . . Halogenated hydrocarbons
- 7/32 . . containing nitrogen
- 7/3209 . . . {Amines or imines with one to four nitrogen atoms; Quaternized amines}
- 7/3218 . . . {Alkanolamines; Alkanolamines}
- 7/3227 . . . {Ethers thereof}
- 7/3236 . . . {Aldehydes, ketones, acetals, ketals thereof}
- 7/3245 . . . {Aminoacids}
- 7/3254 . . . {Esters or carbonates thereof}
- 7/3263 . . . {Amides; Imides}
- 7/3272 . . . {Urea; Guanidine; Derivatives thereof}
- 7/3281 . . . {Heterocyclic compounds}
- 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)chlorocarbons}

- 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 [C11D 15/04](#))**
- 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 . . Superfating agents
- 10/00 Compositions of detergents, not provided for by one single preceding group**
- 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 using cleaning compositions}**
- 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 15/00)**
- 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 F27)
- 13/28 . Embossing; Polishing
- 13/30 . Recovery of soap, e.g. from spent solutions
- 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}
- 17/0008 . {aqueous liquid non soap compositions (C11D 3/0015, C11D 3/3947, C11D 3/3956 take precedence)}
- WARNING**
- This subgroup is not longer used for the classification of new documents from 01 November 2011
- 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 phases, (thixotropic solutions C11D 17/003)}
- 17/003 . . {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](#))