

# 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

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

<a href="#">C11D 1/68</a>	covered by	<a href="#">C11D 3/2003</a>
<a href="#">C11D 1/70</a>	covered by	<a href="#">C11D 3/2003</a>
<a href="#">C11D 3/44</a>	covered by	<a href="#">C11D 3/43</a>
<a href="#">C11D 3/46</a>	covered by	<a href="#">C11D 3/2079</a> , <a href="#">C11D 9/48</a>
<a href="#">C11D 3/60</a>	covered by	<a href="#">C11D 3/00</a>
<a href="#">C11D 7/18</a>	covered by	<a href="#">C11D 3/39</a>
<a href="#">C11D 7/38</a>	covered by	<a href="#">C11D 3/39</a>
<a href="#">C11D 7/42</a>	covered by	<a href="#">C11D 3/386</a>
<a href="#">C11D 7/52</a>	covered by	<a href="#">C11D 7/50</a>
<a href="#">C11D 7/54</a>	covered by	<a href="#">C11D 3/395</a>
<a href="#">C11D 7/56</a>	covered by	<a href="#">C11D 3/395</a>
<a href="#">C11D 7/60</a>	covered by	<a href="#">C11D 7/00</a>
<a href="#">C11D 9/50</a>	covered by	<a href="#">C11D 3/48</a>
<a href="#">C11D 9/60</a>	covered by	<a href="#">C11D 9/00</a>
<a href="#">C11D 10/02</a>	covered by	<a href="#">C11D 3/00</a>
<a href="#">C11D 10/06</a>	covered by	<a href="#">C11D 9/00</a>

- 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.

- 1/002 . {Surface-active compounds containing sulfur ( $\text{SO}_3$  and  $\text{SO}_4$ , [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 . . . {Acylisethionates}

- 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}
- 1/521 . . . {Carboxylic amides ( $R^1$ -CO-NR<sup>2</sup>R<sup>3</sup>), where R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup> are alkyl or alkenyl groups}
- 1/523 . . . {Carboxylic alkylolamides, or dialkylolamides, or hydroxycarboxylic amides ( $R^1$ -CO-NR<sup>2</sup>R<sup>3</sup>), where R<sup>1</sup>, R<sup>2</sup> or R<sup>3</sup> contain one hydroxy group per alkyl group}
- 1/525 . . . {Carboxylic amides ( $R^1$ -CO-NR<sup>2</sup>R<sup>3</sup>), where R<sup>1</sup>, R<sup>2</sup> or R<sup>3</sup> contain two or more hydroxy groups per alkyl group, e.g. R<sup>3</sup> being a reducing sugar rest}
- 1/526 . . . {Carboxylic amides ( $R^1$ -CO-NR<sup>2</sup>R<sup>3</sup>), where R<sup>1</sup>, R<sup>2</sup> or R<sup>3</sup> are polyalkoxylated}
- 1/528 . . . {Carboxylic amides ( $R^1$ -CO-NR<sup>2</sup>R<sup>3</sup>), where at least one of the chains R<sup>1</sup>, R<sup>2</sup> or R<sup>3</sup> 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; {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 {Sulfobetaines}
- 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.  $\text{Al}_2\text{O}_3$ ,  $\text{TiO}_2$ ,  $\text{CaO}$ ,  $\text{Ca(OH)}_2$ }
- 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  $\text{NaMeSi}_x\text{O}_{2x+1}\text{YH}_2\text{O}$ }
- 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}
- 3/20 . . containing oxygen {([C11D 3/162](#), [C11D 3/164](#), [C11D 3/166](#), [C11D 3/168](#) take precedence)}
- 3/2003 . . . {Alcohols; Phenols}

#### NOTES

- 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
- 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](#)

- 3/2006 . . . . {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}

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}	3/3746	. . . {Macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds}
3/24	. . containing halogen {(C11D 3/162, C11D 3/164, C11D 3/166, C11D 3/168 take precedence)}	3/3749	. . . . {Polyolefins; Halogenated polyolefins; Natural or synthetic rubber; Polyarylolefins; Halogenated polyarylolefins}
3/245	. . . {containing fluorine}	3/3753	. . . . {Polyvinylalcohol; Ethers or esters thereof}
3/26	. . containing nitrogen {(C11D 3/162, C11D 3/164, C11D 3/166, C11D 3/168 take precedence)}	3/3757	. . . . {(Co)polymerised carboxylic acids, -anhydrides, -esters in solid and liquid compositions}
3/28	. . . Heterocyclic compounds containing nitrogen in the ring	3/3761	. . . . . {in solid compositions}
3/30	. . . Amines; Substituted amines {; Quaternized amines}	3/3765	. . . . . {in liquid compositions}
3/32	. . . Amides; Substituted amides	3/3769	. . . . {(Co)polymerised monomers containing nitrogen, e.g. carbonamides, nitriles, amines}
3/323	. . . . {urea or derivatives thereof}	3/3773	. . . . . {in liquid compositions}
3/33	. . . Amino carboxylic acids	3/3776	. . . . . {Heterocyclic compounds, e.g. lactam}
3/34	. . containing sulfur {(C11D 3/162, C11D 3/164, C11D 3/166, C11D 3/168 take precedence)}	3/378	. . . . {(Co)polymerised monomers containing sulfur, e.g. sulfonate}
		3/3784	. . . . {(Co)polymerised monomers containing phosphorus}

**NOTES**

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

- 3/3788 . . . {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}
<b>NOTE</b>	
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**

<b>9/00</b>	<b>Compositions of detergents based essentially on soap (compositions containing resin soap <a href="#">C11D 15/04</a>)</b>
9/002	. {Non alkali-metal soaps}
9/005	. {Synthetic soaps ( <a href="#">see also C11D 1/04</a> )}
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}
<b>NOTE</b>	
In groups <a href="#">C11D 9/06</a> - <a href="#">C11D 9/42</a> , 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 {( <a href="#">C11D 9/225</a> takes precedence)}
9/26	. . . containing oxygen {( <a href="#">C11D 9/225</a> takes precedence)}
9/262	. . . . {containing carbohydrates}
9/265	. . . . {containing glycerol}
9/267	. . . . {containing free fatty acids ( <a href="#">see also C11D 9/48</a> )}
9/28	. . . containing halogen {( <a href="#">C11D 9/225</a> takes precedence)}
9/30	. . . containing nitrogen {( <a href="#">C11D 9/225</a> takes precedence)}
9/32	. . . containing sulfur {( <a href="#">C11D 9/225</a> takes precedence)}
9/34	. . . containing phosphorus {( <a href="#">C11D 9/225</a> takes precedence)}
9/36	. . . containing silicon {( <a href="#">C11D 9/225</a> 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
<b>10/00</b>	<b>Compositions of detergents, not provided for by one single preceding group</b>

- 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)}
  - 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](#))}
  - 17/003 . . {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](#))