

# 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

##### NOTES

1. When classifying in the mixture groups of this subclass, any individual ingredient of a composition which is not identified by such classification, and which itself is determined to be novel and non-obvious, must also be classified in groups [C11D 1/00](#) - [C11D 9/00](#). The individual ingredient can be either a single substance or a composition in itself.
2. Any ingredient of a composition which is not identified by the classification according to Note (1) above, and which is considered to represent information of interest for search, may also be classified in groups [C11D 1/00](#) - [C11D 9/00](#). This can, for example, be the case when it is considered of interest to enable searching of compositions using a combination of classification symbols. Such non-obligatory classification should be given as "additional information".
3. {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:

<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>
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 1/88](#), the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, a compound is classified in the last appropriate place.

{This Note corresponds to IPC Note (1) relating to [C11D 1/02](#) - [C11D 1/88](#).}

- |       |   |
|-------|---|
| 1/002 | • {Surface-active compounds containing sulfur (SO <sub>3</sub> and SO <sub>4</sub> , <a href="#">C11D 1/12</a> ; sulfonium compounds <a href="#">C11D 1/60</a> ; sulfoxides <a href="#">C11D 1/755</a> ; sulfobetaines <a href="#">C11D 1/92</a> )} |
| 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 ( $R^1\text{-CO-NR}^2\text{R}^3$ ), where  $R^1$ ,  $R^2$  and  $R^3$  are alkyl or alkenyl groups}
- 1/523 . . . {Carboxylic alkylolamides, or dialkylolamides, or hydroxycarboxylic amides ( $R^1\text{-CO-NR}^2\text{R}^3$ ), where  $R^1$ ,  $R^2$  or  $R^3$  contain one hydroxy group per alkyl group}
- 1/525 . . . {Carboxylic amides ( $R^1\text{-CO-NR}^2\text{R}^3$ ), where  $R^1$ ,  $R^2$  or  $R^3$  contain two or more hydroxy groups per alkyl group, e.g.  $R^3$  being a reducing sugar rest}
- 1/526 . . . {Carboxylic amides ( $R^1\text{-CO-NR}^2\text{R}^3$ ), where  $R^1$ ,  $R^2$  or  $R^3$  are polyalkoxylated}
- 1/528 . . . {Carboxylic amides ( $R^1\text{-CO-NR}^2\text{R}^3$ ), where at least one of the chains  $R^1$ ,  $R^2$  or  $R^3$  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 {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**
- NOTES**
- In groups C11D 3/02 - C11D 3/39, the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, a compound is classified in the last appropriate place.  
{This Note corresponds to IPC Note (1) relating to C11D 3/02 - C11D 3/39.}
  - {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)}
- 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. Al<sub>2</sub>O<sub>3</sub>, TiO<sub>2</sub>, CaO, Ca(OH)<sub>2</sub>}
- 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<sub>2x+1</sub>YH<sub>2</sub>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}	3/28	. . . Heterocyclic compounds containing nitrogen in the ring
	<b>NOTES</b>	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 <a href="#">C11D 3/2003</a> , <a href="#">C11D 3/2006</a> or <a href="#">C11D 3/2041</a> and indexed for the individual alternatives using codes chosen from <a href="#">C11D 3/2006 - C11D 3/2065</a>	3/323	. . . . {urea or derivatives thereof}
3/2006	. . . . {Monohydric alcohols}	3/33	. . . Amino carboxylic acids
3/201	. . . . {linear}	3/34	. . containing sulfur {( <a href="#">C11D 3/162</a> , <a href="#">C11D 3/164</a> , <a href="#">C11D 3/166</a> , <a href="#">C11D 3/168</a> take precedence)}
3/2013	. . . . . {fatty or with at least 8 carbon atoms in the alkyl chain}		<b>NOTES</b>
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 <a href="#">C11D 3/00</a> ) and indexed for the individual functional groups using codes chosen from <a href="#">C11D 3/3409 - C11D 3/349</a>
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 {( <a href="#">C11D 3/162</a> , <a href="#">C11D 3/164</a> , <a href="#">C11D 3/166</a> , <a href="#">C11D 3/168</a> 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 <a href="#">C11D 10/00 - C11D 10/04</a> )}	3/368	. . . . {containing fluorine}
3/2082	. . . . {Polycarboxylic acids-salts thereof}	3/37	. . Polymers {(polymeric surface-active agents <a href="#">C11D 1/008</a> ; carbohydrates <a href="#">C11D 3/22</a> )}
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 <a href="#">C11D 3/3788</a> )}	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 {( <a href="#">C11D 3/162</a> , <a href="#">C11D 3/164</a> , <a href="#">C11D 3/166</a> , <a href="#">C11D 3/168</a> take precedence)}		
3/245	. . . {containing fluorine}		
3/26	. . containing nitrogen {( <a href="#">C11D 3/162</a> , <a href="#">C11D 3/164</a> , <a href="#">C11D 3/166</a> , <a href="#">C11D 3/168</a> 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}
- 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.

- 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}

- 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](#))**

**NOTE**

In groups [C11D 9/06](#) - [C11D 9/42](#), the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, a compound is classified in the last appropriate place. {This Note corresponds to IPC Note (1) relating to [C11D 9/06](#) - [C11D 9/42](#).}

- 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}
- 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)}
- 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](#))