

# 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; 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.}

##### WARNING

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>

#### 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>, [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}
- 1/02 . Anionic compounds {([C11D 1/002](#), [C11D 1/004](#), [C11D 1/008](#) take precedence)}
- 1/04 . . Carboxylic acids or salts thereof (soap [C11D 9/00](#))
- 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
- 1/12 . . Sulfonic acids or sulfuric acid esters; Salts thereof
- 1/123 . . . {derived from carboxylic acids, e.g. sulfosuccinates}

- 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 or phosphonites}
- 1/345 . . . {Phosphates or 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}
- 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 epoxycycloalkanes 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}
- 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 . . 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, i.e. 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**
- NOTES**
1. 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

## C11D

C11D 3/00

(continued)

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](#).}

2. {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 or 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 or lenses}
- 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 or bases}
- 3/046 . . . {Salts}
- 3/048 . . . . {Nitrates or 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 or hydroxides, e.g. Al<sub>2</sub>O<sub>3</sub>, TiO<sub>2</sub>, CaO or Ca(OH)<sub>2</sub>}
- 3/122 . . . {Sulfur-containing, e.g. sulfates, sulfites or gypsum}
- 3/1226 . . . {Phosphorus containing}
- 3/1233 . . . {Carbonates, e.g. calcite or dolomite}
- 3/124 . . . {Silicon containing, e.g. silica, silex, quartz or glass beads}

- 3/1246 . . . . {Silicates, e.g. diatomaceous earth}
- 3/1253 . . . . . {Layer silicates, e.g. talcum, kaolin, clay, bentonite, smectite, montmorillonite, hectorite or 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 or 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 or 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}

### **NOTES**

1. {In this group glucerol is not taken into account for applying the last place rule, when present in a mixture of alcohols or as an alternative from a series of alcohols.}
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 the individual alternatives are classified with additional symbols 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}
- 3/2027 . . . . . {unsaturated}
- 3/2031 . . . . . {fatty or with at least 8 carbon atoms in the alkenyl chain}
- 3/2034 . . . . . {aromatic}
- 3/2037 . . . . . {Terpenes}
- 3/2041 . . . . {Dihydric alcohols}
- 3/2044 . . . . . {linear}

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 or sulfolanones}
3/2055	. . . . . {unsaturated}	3/349	. . . {additionally containing nitrogen atoms, e.g. nitro, nitroso, amino, imino, nitrilo, nitrile groups containing compounds or their derivatives or 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 or phosphonites}
3/2065	. . . . . {Polyhydric alcohols}	3/362	. . . {Phosphates or 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}	3/368	. . . . . {containing fluorine}
3/2082	. . . . . {Polycarboxylic acids-salts thereof}	3/37	. . Polymers {(polymeric surface-active agents C11D 1/008; polysaccharides C11D 3/222)}
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 or polycarbonates}
3/22	. . . Carbohydrates or derivatives thereof	3/3719	. . . . . {Polyamides or polyimides}
3/221	. . . . . {Mono, di- or trisaccharides or derivatives thereof}	3/3723	. . . . . {Polyamines or polyalkyleneimines}
3/222	. . . . . {Natural or synthetic polysaccharides, e.g. cellulose, starch, gum, alginic acid or 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 or 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 or 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}
<b>NOTES</b>		3/3784	. . . . . {(Co)polymerised monomers containing phosphorus}
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		3/3788	. . . {Graft polymers}
2. In case of mixtures or a list of alternatives or Markush formulae each individual compound is classified and indexed according to Note 1.		3/3792	. . . {Amine oxide containing polymers}
3/3409	. . . {Alkyl -, alkenyl -, cycloalkyl - or terpene sulfates or sulfonates}	3/3796	. . . {Amphoteric polymers or zwitterionic polymers}
3/3418	. . . {Toluene -, xylene -, cumene -, benzene - or naphthalene sulfonates or sulfates}	3/38	. . Products with no well-defined composition {, e.g. natural products}
3/3427	. . . {containing thiol, mercapto or sulfide groups, e.g. thioethers or mercaptals}	3/381	. . . {Microorganisms}
3/3436	. . . {containing disulfide groups}	3/382	. . . Vegetable products, e.g. soya meal, wood flour, sawdust
3/3445	. . . {containing sulfinio groups, e.g. dimethyl sulfoxide}	3/384	. . . Animal products
3/3454	. . . {containing sulfone groups, e.g. vinyl sulfones}		
3/3463	. . . {containing thio sulfate or sulfite groups}		



- 3/3845 . . . . {Antibodies}
- 3/386 . . . Preparations containing enzymes {, e.g. protease or 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 or reductase}
- 3/38645 . . . . {containing cellulase}
- 3/38654 . . . . {containing oxidase or reductase}
- 3/38663 . . . . {Stabilised liquid enzyme compositions}
- 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 or 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 the individual alternatives are classified with additional symbols 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 lactams}
- 3/3922 . . . . . {Cyanamides}
- 3/3925 . . . . . {Nitriles; Isocyanates or quarternary ammonium nitriles}
- 3/3927 . . . . . {Quarternary ammonium compounds}
- 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
- 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 groups [C11D 7/02](#) - [C11D 7/46](#), 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.

- 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 or ketals}
- 7/265 . . . {Carboxylic acids or salts thereof}
- 7/266 . . . {Esters or carbonates}
- 7/267 . . . {Heterocyclic compounds}
- 7/268 . . . {Carbohydrates or 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 or alkanolamines}
- 7/3227 . . . {Ethers thereof}
- 7/3236 . . . {Aldehydes, ketones, acetals or ketals thereof}
- 7/3245 . . . {Aminoacids}
- 7/3254 . . . {Esters or carbonates thereof}
- 7/3263 . . . {Amides or imides}

- 7/3272 . . . {Urea, guanidine or derivatives thereof}
- 7/3281 . . . {Heterocyclic compounds}
- 7/329 . . . {Carbohydrate or 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, the first place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, 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 or 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}
- 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 or 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}
- 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**
- 11/0082 . {one or more of the detergent ingredients being in a liquefied state, e.g. slurry, paste or 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 or 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 or 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 or flakes
  - 13/22 . Cutting
  - 13/24 . . Slicing soap on the cooling drum
  - 13/26 . Drying
  - 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 or soaps characterised by their shape or physical properties (shaping soap C11D 13/14)**
- 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 or network containing non-Newtonian phase}
  - 17/003 . . {Colloidal solutions, e.g. gels; Thixotropic solutions or 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}
  - 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**

#### **Objects cleaned; Non-standard cleaning processes**

- 2111/00 Cleaning compositions characterised by the objects to be cleaned; Cleaning compositions characterised by non-standard cleaning or washing processes**
- 2111/10 . Objects to be cleaned
  - 2111/12 . . Soft surfaces, e.g. textile
  - 2111/14 . . Hard surfaces
  - 2111/16 . . . Metals
  - 2111/18 . . . Glass; Plastics
  - 2111/20 . . . Industrial or commercial equipment, e.g. reactors, tubes or engines
  - 2111/22 . . . Electronic devices, e.g. PCBs or semiconductors
  - 2111/24 . . . Mineral surfaces, e.g. stones, frescoes, plasters, walls or concretes
  - 2111/40 . Specific cleaning or washing processes
  - 2111/42 . . Application of foam or a temporary coating on the surface to be cleaned
  - 2111/44 . . Multi-step processes
  - 2111/46 . . applying energy, e.g. irradiation
  - 2111/48 . . Regeneration of cleaning solutions