

**CPC****COOPERATIVE PATENT CLASSIFICATION****C11D**

**DETERGENT COMPOSITIONS** ( preparations specially adapted for washing the hair [A61K 7/075](#); 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](#) to [C11D 1/655](#), [C11D 1/825](#) to [C11D 1/86](#), [C11D 1/94](#) to [C11D 1/945](#) and [C11D 10/00](#) to [C11D 10/06](#), are indexed using codes chosen from [C11D 1/00](#) to [C11D 1/92](#) to provide information on the individual ingredients on the compositions

**WARNING**

The following IPC groups are not used in the CPC system. Subject matter covered by these groups is classified in the following CPC groups:

[C11D 1/68](#) covered by [C11D 3/2003](#)  
[C11D 1/70](#) covered by [C11D 3/2003](#)  
[C11D 3/44](#) covered by [C11D 3/43](#)  
[C11D 3/46](#) covered by [C11D 3/2079](#), [C11D 9/48](#)  
[C11D 3/60](#) covered by [C11D 3/00](#)  
[C11D 7/18](#) covered by [C11D 3/39](#)  
[C11D 7/38](#) covered by [C11D 3/39](#)  
[C11D 7/42](#) covered by [C11D 3/386](#)  
[C11D 7/52](#) covered by [C11D 7/50](#)  
[C11D 7/54](#) covered by [C11D 3/395](#)  
[C11D 7/56](#) covered by [C11D 3/395](#)  
[C11D 7/60](#) covered by [C11D 7/00](#)  
[C11D 9/20](#) covered by partly covered by [C11D 9/444](#)  
[C11D 9/50](#) covered by [C11D 3/48](#)  
[C11D 9/60](#) covered by [C11D 9/00](#)  
[C11D 10/02](#) covered by [C11D 3/00](#)  
[C11D 10/06](#) covered by [C11D 9/00](#)

**C11D 1/00**

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

**NOTE**

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

**C11D 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](#) ) }

**C11D 1/004**

- . { Surface-active compounds containing F }

**C11D 1/006**

- .. { Surface-active compounds containing fluorine and phosphorus }

**C11D 1/008**

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

**C11D 1/02**

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

- C11D 1/04 .. Carboxylic acids or salts thereof { [see also C11D 9/005](#) }
- C11D 1/06 ... Ether- or thio-ether carboxylic acids
- C11D 1/08 ... Polycarboxylic acids containing no nitrogen or sulfur
- C11D 1/10 ... Amino-carboxylic acids; Imino-carboxylic acids; Fatty acid condensates thereof { ( [betaines C11D 1/90](#) ) }
- C11D 1/12 .. Sulfonic acids or sulfuric acid esters; Salts thereof
- C11D 1/123 ... { [derived from carboxylic acids, e.g. sulfosuccinates](#) ( [from fatty acids see C11D 1/28](#) ) }
- C11D 1/126 ... { [Acyliethionates](#) }
- C11D 1/14 ... derived from aliphatic hydrocarbons or mono-alcohols
- C11D 1/143 .... { [Sulfonic acid esters](#) }
- C11D 1/146 .... { [Sulfuric acid esters](#) }
- C11D 1/16 ... derived from divalent or polyvalent alcohols
- C11D 1/18 ... derived from amino alcohols
- C11D 1/20 .... Fatty acid condensates
- C11D 1/22 ... derived from aromatic compounds
- C11D 1/24 .... containing ester or ether groups directly attached to the nucleus
- C11D 1/26 ... derived from heterocyclic compounds
- C11D 1/28 ... Sulfonation products derived from fatty acids or their derivatives, e.g. esters, amides
- C11D 1/29 ... Sulfates of polyoxyalkylene ethers
- C11D 1/30 ... Sulfonation products derived from lignin
- C11D 1/32 .. Protein hydrolysates; Fatty acid condensates thereof
- C11D 1/34 .. Derivatives of acids of phosphorus
- C11D 1/342 ... { [Phosphonates; Phosphinates; Phosphonites](#) }
- C11D 1/345 ... { [Phosphates; Phosphites](#) }
- C11D 1/347 ... { [Other P-containing anionic compounds](#) ( [C11D 1/006](#), [C11D 1/34](#) take precedence ) }
- C11D 1/36 .. of unknown constitution { [e.g. natural products](#) }
- C11D 1/37 .. Mixtures of compounds all of which are anionic
  
- C11D 1/38 . Cationic compounds { ( [C11D 1/002](#), [C11D 1/004](#), [C11D 1/008](#) take precedence ) }
- C11D 1/385 .. { [Cationic compounds containing P](#) ( [phosphonium compounds C11D 1/60](#) ) }
- C11D 1/40 .. Monoamines or polyamines; Salts thereof
- C11D 1/42 .. Amino alcohols or amino ethers
- C11D 1/44 ... Ethers of polyoxyalkylenes with amino alcohols; Condensation products of epoxyalkanes with amines
- C11D 1/46 .. Esters of carboxylic acids with amino alcohols; Esters of amino carboxylic acids with alcohols
- C11D 1/48 .. N-containing polycondensation products
- C11D 1/50 .. Derivatives of urea, thiourea, cyanamide, guanidine or urethanes
- C11D 1/52 .. Carboxylic amides, alkylolamides or imides { [or their condensation products with alkylene oxides](#) }

**WARNING**

Until September 2008, when classification was made, group [C11D 3/07](#) took precedence over group [C11D 1/52](#)

- C11D 1/521      ...      { Carboxylic amides (R1-CO-NR2R3), where R1, R2 and R3 are alkyl or alkenyl groups }
- C11D 1/523      ...      { Carboxylic alkylolamides, or dialkylolamides, or hydroxycarboxylic amides (R1-CO-NR2R3), where R1, R2 or R3 contain one hydroxy group per alkyl group }
- C11D 1/525      ...      { Carboxylic amides (R1-CO-NR2R3), where R1, R2 or R3 contain two or more hydroxy groups per alkyl group, e.g. R3 being a reducing sugar rest }
- C11D 1/526      ...      { Carboxylic amides (R1-CO-NR2R3), where R1, R2 or R3 are polyalkoxylated }
- C11D 1/528      ...      { Carboxylic amides (R1-CO-NR2R3), where at least one of the chains R1, R2 or R3 is interrupted by a functional group, e.g. a -NH-, -NR-, -CO-, or -CON-group ( ethers [C11D 1/526](#) ) }
- C11D 1/54        ..      Hydrazides of carboxylic acids
- C11D 1/56        ..      containing nitro or nitroso groups
- C11D 1/58        ..      Heterocyclic compounds
- C11D 1/60        ..      Sulfonium or phosphonium compounds
- C11D 1/62        ..      Quaternary ammonium compounds
- C11D 1/64        ..      of unknown constitution { e.g. natural products }
- C11D 1/645      ..      Mixtures of compounds all of which are cationic
- C11D 1/65        ..      Mixtures of anionic with cationic compounds
- C11D 1/652      ...      { Mixtures of anionic compounds with carboxylic amides or alkylol amides }
- C11D 1/655      ...      Mixtures of sulfonated products with alkylolamides of carboxylic acids

#### **WARNING**

Until September 2008, when classification was made, group [C11D 3/066](#) took precedence over group [C11D 1/655](#)

- C11D 1/66        .      Non-ionic compounds { ( [C11D 1/002](#), [C11D 1/004](#), [C11D 1/008](#) take precedence ) }
- C11D 1/662      ..      { Carbohydrates or derivatives }
- C11D 1/665      ..      { Arsine oxides }
- C11D 1/667      ..      { Neutral esters e.g. sorbitan esters; see also [C11D 1/74](#) and [C11D 1/78](#) }
- C11D 1/72        ..      Ethers of polyoxyalkylene glycols

#### **WARNING**

Until September 2008, when classification was made, group [C11D 3/075](#) took precedence over group [C11D 1/72](#)

- C11D 1/721      ...      { End blocked ethers }
- C11D 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 ) }
- C11D 1/74        ..      Carboxylates or sulfonates { esters } of polyoxyalkylene glycols
- C11D 1/75        ..      Amino oxides

C11D 1/755	.. Sulfoxides
C11D 1/76	.. Synthetic resins containing no nitrogen
C11D 1/78	.. Neutral esters of acids of phosphorus
C11D 1/79	.. Phosphine oxides
C11D 1/80	.. Derivatives of lignin containing no sulfo- or sulfate groups
C11D 1/82	.. Compounds containing silicon
C11D 1/825	.. Mixtures of compounds all of which are non-ionic
C11D 1/8255	... { containing a combination of compounds differently alcoxylised or with differently alkylated chains }
C11D 1/83	.. Mixtures of non-ionic with anionic compounds
C11D 1/8305	... { containing a combination of non-ionic compounds differently alcoxylised or with different alkylated chains }
C11D 1/831	... of sulfonates with ethers of polyoxyalkylenes without phosphates
C11D 1/835	.. Mixtures of non-ionic with cationic compounds
C11D 1/8355	... { containing a combination of non-ionic compounds differently alcoxylised or with different alkylated chains }
C11D 1/86	. { Ternary } Mixtures of anionic, cationic, and non-ionic compounds
C11D 1/88	. Ampholytes; Electroneutral compounds { ( <a href="#">C11D 1/002</a> , <a href="#">C11D 1/004</a> , <a href="#">C11D 1/008</a> take precedence ) }
C11D 1/883	.. { Aminimide ( = ammonioamidates ) }
C11D 1/886	.. { Ampholytes containing P }
C11D 1/90	.. Betaines
C11D 1/92	.. Sulfobetaines { Sulfitobetaines }
C11D 1/94	.. Mixtures with anionic, cationic, or non-ionic compounds
C11D 1/945	... { containing a combination of non-ionic compounds differently alcoxylised or with different alkylated chains }
<b>C11D 3/00</b>	<b>Other compounding ingredients of detergent compositions covered in group <a href="#">C11D 1/00</a></b>

**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

C11D 3/0005	. { Other compounding ingredients characterised by their effect }
C11D 3/001	.. { Softening compositions }
C11D 3/0015	... { liquid }
C11D 3/0021	.. { Dye-stain or dye-transfer inhibiting compositions }
C11D 3/0026	.. { Low foaming or foam regulating compositions }
C11D 3/0031	.. { Carpet, upholstery, fur, and leather cleansers }
C11D 3/0036	.. { Soil deposition preventing compositions; Antiredeposition agents }
C11D 3/0042	.. { Reducing agents }
C11D 3/0047	.. { pH regulated compositions }

C11D 3/0052	.. { Gas evolving or heat producing compositions }
C11D 3/0057	.. { Oven-cleaning compositions }
C11D 3/0063	.. { Photo- activating compounds }
C11D 3/0068	.. { Deodorant compositions }
C11D 3/0073	.. { Anticorrosion compositions }
C11D 3/0078	.. { Compositions for cleaning contact lenses, spectacles, lenses ( disinfecting contact lenses <a href="#">A61L 2/00</a> ; mechanical cleaning <a href="#">G02C 13/00</a> ) }

**NOTE**

In groups [C11D 3/02](#) to [C11D 3/39](#), in the absence of an indication to the contrary, a compound is classified in the last appropriate place.

C11D 3/0084	.. { Antioxidants; Free-radical scavengers }
C11D 3/0089	.. { Pearlescent compositions; Opacifying agents }
C11D 3/0094	.. { High foaming compositions }

C11D 3/02	. Inorganic compounds; { Elemental compounds }
C11D 3/04	.. Water-soluble compounds
C11D 3/042	... { Acids }
C11D 3/044	... { Hydroxides, bases }
C11D 3/046	... { Salts }
C11D 3/048	.... { Nitrates, nitrites }
C11D 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](#)

C11D 3/062	.... { Special methods concerning phosphates }
C11D 3/065	.... in admixture with sulfonated products
C11D 3/066	..... and with alkyloamides of carboxylic acids
C11D 3/07	.... in admixture with alkyloamides of carboxylic acids
C11D 3/075	.... in admixture with ethers of polyoxyalkylenes
C11D 3/08	... Silicates
C11D 3/10	... Carbonates; { Bicarbonates }
C11D 3/12	.. Water-insoluble compounds
C11D 3/1206	... { free metals, e.g. aluminium grit or flakes }
C11D 3/1213	... { Oxides, hydroxides, e.g. Al <sub>2</sub> O <sub>3</sub> , TiO <sub>2</sub> , CaO, Ca(OH) <sub>2</sub> }
C11D 3/122	... { Sulfur-containing, e.g. sulfates, sulfites, gypsum }
C11D 3/1226	... { Phosphorus containing }
C11D 3/1233	... { Carbonates, e.g. calcite, dolomite }
C11D 3/124	... { Silicon containing, e.g. silica, silex, quartz, glass beads }
C11D 3/1246	.... { Silicates, e.g. diatomaceous earth }
C11D 3/1253	..... { Layer silicates, e.g. talcum, kaolin, clay, bentonite, smectite,

		montmorillonite, hectorite, attapulgite }
C11D 3/126	.....	{ in solid compositions }
C11D 3/1266	.....	{ in liquid compositions }
C11D 3/1273	.....	{ Crystalline layered silicates of type $\text{NaMeSi}_x\text{O}_{2x+1}\text{YH}_2\text{O}$ }
C11D 3/128	.....	{ Aluminium silicates, e.g. zeolites ( <a href="#">C11D 3/1253</a> takes precedence ) }
C11D 3/1286	.....	{ Stabilised aqueous aluminosilicate suspensions }
C11D 3/1293	.....	{ Feldspar; Perlite; Pumice; Portland cement }
C11D 3/14	...	Fillers; Abrasives; { Abrasive compositions; Suspending or absorbing agents not provided for in one single group of <a href="#">C11D 3/12</a> ; Specific features concerning abrasives, e.g. granulometry, mixtures ( dyes, pigments <a href="#">C11D 3/40</a> ) }
C11D 3/16	.	Organic compounds
C11D 3/162	..	{ containing Si }
C11D 3/164	..	{ containing a carbon-carbon triple bond }
C11D 3/166	..	{ containing borium }
C11D 3/168	..	{ Organometallic compounds or organometallic complexes }
C11D 3/18	..	Hydrocarbons { ( <a href="#">C11D 3/164</a> takes precedence ) }
C11D 3/181	...	{ linear }
C11D 3/182	...	{ branched }
C11D 3/184	...	{ unsaturated }
C11D 3/185	...	{ cyclic }
C11D 3/187	...	{ aromatic }
C11D 3/188	...	{ Terpenes }
C11D 3/20	..	containing oxygen { ( <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 ) }
C11D 3/2003	...	{ Alcohols; Phenols }

**NOTE**

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](#) to [C11D 3/2065](#)

C11D 3/2006	....	{ Monohydric alcohols }
C11D 3/201	.....	{ linear }
C11D 3/2013	.....	{ fatty or with at least 8 carbon atoms in the alkyl chain }
C11D 3/2017	.....	{ branched }
C11D 3/202	.....	{ fatty or with at least 8 carbon atoms in the alkyl chain }
C11D 3/2024	.....	{ cyclic; polycyclic }
C11D 3/2027	.....	{ unsaturated }
C11D 3/2031	.....	{ fatty or with at least 8 carbon atoms in the alkenyl chain }
C11D 3/2034	.....	{ aromatic }

C11D 3/2037	.....	{ Terpenes }
C11D 3/2041	....	{ Dihydric alcohols }
C11D 3/2044	.....	{ linear }
C11D 3/2048	.....	{ branched }
C11D 3/2051	.....	{ cyclic; polycyclic }
C11D 3/2055	.....	{ unsaturated }
C11D 3/2058	.....	{ aromatic }
C11D 3/2062	.....	{ Terpene }
C11D 3/2065	....	{ Polyhydric alcohols }
C11D 3/2068	...	{ Ethers }
C11D 3/2072	...	{ Aldehydes-ketones }
C11D 3/2075	...	{ Carboxylic acids-salts thereof }
C11D 3/2079	....	{ Monocarboxylic acids-salts thereof ( soaps <a href="#">C11D 10/06</a> to <a href="#">C11D 10/04</a> ) }
C11D 3/2082	....	{ Polycarboxylic acids-salts thereof }
C11D 3/2086	....	{ Hydroxy carboxylic acids-salts thereof }
C11D 3/2089	....	{ Ether acids-salts thereof }
C11D 3/2093	...	{ Esters; Carbonates }
C11D 3/2096	...	{ Heterocyclic compounds }
C11D 3/22	...	Carbohydrates or derivatives thereof { ( graft polymers <a href="#">C11D 3/3788</a> ) }
C11D 3/221	....	{ Mono, di- or trisaccharides or derivatives thereof }
C11D 3/222	....	{ Natural or synthetic polysaccharides, e.g. cellulose, starch, gum, alginic acid, cyclodextrin }
C11D 3/223	.....	{ oxidised }
C11D 3/225	.....	{ etherified, e.g. CMC }
C11D 3/226	.....	{ esterified }
C11D 3/227	.....	{ with nitrogen-containing groups }
C11D 3/228	.....	{ with phosphorus- or sulfur-containing groups }
C11D 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 ) }
C11D 3/245	...	{ containing fluorine }
C11D 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 ) }
C11D 3/28	...	Heterocyclic compounds containing nitrogen in the ring
C11D 3/30	...	Amines; Substituted amines; { Quaternized amines }
C11D 3/32	...	Amides; Substituted amides
C11D 3/323	....	{ urea or derivatives thereof }
C11D 3/33	...	Amino carboxylic acids
C11D 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 ) }

**NOTE**

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](#) to [C11E 3/349](#)

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

<a href="#">C11D 3/3409</a>	...	{ Alkyl -, alkenyl -, cycloalkyl - or terpene sulfates or sulfonates }
<a href="#">C11D 3/3418</a>	...	{ Toluene -, xylene -, cumene -, benzene - or naphthalene sulfonates or sulfates }
<a href="#">C11D 3/3427</a>	...	{ containing thiol, mercapto or sulfide groups, e.g. thioethers, mercaptals }
<a href="#">C11D 3/3436</a>	...	{ containing disulfide groups }
<a href="#">C11D 3/3445</a>	...	{ containing sulfinio groups, e.g. dimethyl sulfoxide }
<a href="#">C11D 3/3454</a>	...	{ containing sulfone groups, e.g. vinyl sulfones }
<a href="#">C11D 3/3463</a>	...	{ containing thio sulfate or sulfite groups }
<a href="#">C11D 3/3472</a>	...	{ additionally containing -COOH groups or derivatives thereof }
<a href="#">C11D 3/3481</a>	...	{ containing sulfur in a heterocyclic ring, e.g. sultones, sulfolanes }
<a href="#">C11D 3/349</a>	...	{ additionally containing nitrogen atoms, e.g. nitro, nitroso, amino, imino, nitrilo, nitrile groups containing compounds or their derivatives, thio urea }
<a href="#">C11D 3/36</a>	..	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 ) }
<a href="#">C11D 3/361</a>	...	{ Phosphonates, phosphinates, phosphonites }
<a href="#">C11D 3/362</a>	...	{ Phosphates, phosphites }
<a href="#">C11D 3/364</a>	...	{ containing nitrogen }
<a href="#">C11D 3/365</a>	...	{ containing carboxyl groups }
<a href="#">C11D 3/367</a>	...	{ containing halogen }
<a href="#">C11D 3/368</a>	....	{ containing fluorine }
<a href="#">C11D 3/37</a>	..	Polymers { ( polymeric surface-active agents <a href="#">C11D 1/008</a> ; carbohydrates <a href="#">C11D 3/22</a> ) }
<a href="#">C11D 3/3703</a>	...	{ Macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds }
<a href="#">C11D 3/3707</a>	....	{ Polyethers, e.g. polyalkyleneoxides }
<a href="#">C11D 3/3711</a>	....	{ Polyacetal carboxylates }
<a href="#">C11D 3/3715</a>	....	{ Polyesters; Polycarbonates }
<a href="#">C11D 3/3719</a>	....	{ Polyamides; Polyimides }
<a href="#">C11D 3/3723</a>	....	{ Polyamines, polyalkyleneamines }
<a href="#">C11D 3/3726</a>	....	{ Polyurethanes }
<a href="#">C11D 3/373</a>	....	{ containing silicones }
<a href="#">C11D 3/3734</a>	.....	{ Cyclic silicones }
<a href="#">C11D 3/3738</a>	.....	{ Alkoxylated silicones }
<a href="#">C11D 3/3742</a>	.....	{ Nitrogen containing silicones }
<a href="#">C11D 3/3746</a>	...	{ Macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds }
<a href="#">C11D 3/3749</a>	....	{ Polyolefins; Halogenated polyolefins; Natural or synthetic rubber; Polyarylolefins; Halogenated polyarylolefins }
<a href="#">C11D 3/3753</a>	....	{ Polyvinylalcohol; Ethers or esters thereof }
<a href="#">C11D 3/3757</a>	....	{ (Co)polymerised carboxylic acids, -anhydrides, -esters in solid and liquid }



		compositions }
C11D 3/3761	.....	{ in solid compositions }
C11D 3/3765	.....	{ in liquid compositions }
C11D 3/3769	....	{ (Co)polymerised monomers containing nitrogen, e.g. carbonamides, nitriles, amines }
C11D 3/3773	.....	{ in liquid compositions }
C11D 3/3776	.....	{ Heterocyclic compounds e.g. lactam }
C11D 3/378	....	{ (Co)polymerised monomers containing sulfur, e.g. sulfonate }
C11D 3/3784	....	{ (Co)polymerised monomers containing phosphorus }
C11D 3/3788	...	{ Graft polymers }
C11D 3/3792	...	{ Amine oxide containing polymers }
C11D 3/3796	...	{ Amphoteric polymers; Zwitterionic polymers }
C11D 3/38	..	Products with no well-defined composition, { e.g. natural products }
C11D 3/381	...	{ Microorganisms }
C11D 3/382	...	Vegetable products, e.g. soya meal, wood flour, sawdust
C11D 3/384	...	Animal products
C11D 3/3845	....	{ Antibodies }
C11D 3/386	...	Preparations containing enzymes, { e.g. protease, amylase }
C11D 3/38609	....	{ Protease or amylase in solid compositions only }
C11D 3/38618	....	{ Protease or amylase in liquid compositions only }
C11D 3/38627	....	{ containing lipase }
C11D 3/38636	....	{ containing enzymes other than protease, amylase, lipase, cellulase, oxidase, reductase }
C11D 3/38645	....	{ containing cellulase }
C11D 3/38654	....	{ containing oxidase, reductase }
C11D 3/38663	....	{ Stabilised liquid enzyme compositions ( chemically modified or immobilised enzymes <a href="#">C11D 3/386</a> , <a href="#">C12N</a> ) }
C11D 3/38672	....	{ Granulated or coated enzymes }
C11D 3/38681	....	{ Chemically modified or immobilised enzymes }
C11D 3/3869	....	{ Enzyme enhancers or mediators }
C11D 3/39	.	Organic or inorganic per-compounds
C11D 3/3902	..	{ combined with specific additives }
C11D 3/3905	...	{ Bleach activators; Bleach catalysts }

**NOTE**

In the absence of an indication to the contrary activators or catalysts are classified in the last appropriate place

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](#) to [C11D 3/3932](#)

C11D 3/3907	....	{ Organic compounds }
C11D 3/391	.....	{ Oxygen-containing compounds }

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

**Guidance heading: Non-surface-active compounds**

**C11D 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](#) to [C11D 7/46](#) a

compound is classified in the last appropriate place.

C11D 7/02	. Inorganic compounds
C11D 7/04	.. Water-soluble compounds
C11D 7/06	... Hydroxides
C11D 7/08	... Acids
C11D 7/10	... Salts
C11D 7/105	.... { Nitrates; Nitrites }
C11D 7/12	.... Carbonates { bicarbonates }
C11D 7/14	.... Silicates
C11D 7/16	.... Phosphates including polyphosphates
C11D 7/20	.. Water-insoluble oxides
C11D 7/22	. Organic compounds
C11D 7/24	.. Hydrocarbons
C11D 7/241	... { linear }
C11D 7/242	... { branched }
C11D 7/244	... { unsaturated }
C11D 7/245	... { cyclic }
C11D 7/247	... { aromatic }
C11D 7/248	... { Terpenes }
C11D 7/26	.. containing oxygen
C11D 7/261	... { Alcohols; Phenols }
C11D 7/262	.... { fatty or with at least 8 carbon atoms in the alkyl or alkenyl chain }
C11D 7/263	... { Ethers }
C11D 7/264	... { Aldehydes; Ketones; Acetals; Ketals }
C11D 7/265	... { Carboxylic acids; Salts thereof }
C11D 7/266	... { Esters; Carbonates }
C11D 7/267	... { Heterocyclic compounds }
C11D 7/268	... { Carbohydrates; Derivatives thereof }
C11D 7/28	.. containing halogen
C11D 7/30	... Halogenated hydrocarbons
C11D 7/32	.. containing nitrogen
C11D 7/3209	... { Amines or imines with one to four nitrogen atoms; Quaternized amines }
C11D 7/3218	... { Alkanolamines; Alkanolimines }
C11D 7/3227	... { Ethers thereof }
C11D 7/3236	... { Aldehydes, ketones, acetals, ketals thereof }
C11D 7/3245	... { Aminoacids }
C11D 7/3254	... { Esters or carbonates thereof }
C11D 7/3263	... { Amides; Imides }

C11D 7/3272	...	{ Urea; Guanidine; Derivatives thereof }
C11D 7/3281	...	{ Heterocyclic compounds }
C11D 7/329	...	{ Carbohydrate, derivatives thereof }
C11D 7/34	..	containing sulfur
C11D 7/36	..	containing phosphorus
C11D 7/40	..	Products in which the composition is not well defined
C11D 7/44	...	Vegetable products
C11D 7/46	...	Animal products
C11D 7/50	.	Solvents
C11D 7/5004	..	{ Organic solvents }

**NOTE**

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

C11D 7/5009	...	{ containing phosphorus, sulfur or silicon, e.g. dimethylsulfoxide }
C11D 7/5013	...	{ containing nitrogen }
C11D 7/5018	...	{ Halogenated solvents }
C11D 7/5022	...	{ containing oxygen }
C11D 7/5027	...	{ Hydrocarbons }
C11D 7/5031	..	{ Azeotropic mixtures of non-halogenated solvents }
C11D 7/5036	..	{ Azeotropic mixtures containing halogenated solvents }
C11D 7/504	...	{ all solvents being halogenated hydrocarbons }
C11D 7/5045	....	{ Mixtures of (hydro)chlorofluorocarbons }
C11D 7/505	....	{ Mixtures of (hydro)fluorocarbons }
C11D 7/5054	....	{ Mixtures of (hydro)chlorofluorocarbons and (hydro) fluorocarbons }
C11D 7/5059	....	{ Mixtures containing (hydro)chlorocarbons }
C11D 7/5063	....	{ Halogenated hydrocarbons containing heteroatoms, e.g. fluoro alcohols }
C11D 7/5068	...	{ Mixtures of halogenated and non-halogenated solvents }
C11D 7/5072	....	{ Mixtures of only hydrocarbons }
C11D 7/5077	....	{ Mixtures of only oxygen-containing solvents }
C11D 7/5081	.....	{ the oxygen-containing solvents being alcohols only }
C11D 7/5086	.....	{ the oxygen-containing solvents being different from alcohols, e.g. mixtures of water and ethers }
C11D 7/509	....	{ Mixtures of hydrocarbons and oxygen-containing solvents }
C11D 7/5095	....	{ Mixtures including solvents containing other heteroatoms than oxygen, e.g. nitriles, amides, nitroalkanes, siloxanes, thioethers }

**Guidance heading: Soap detergents**

**C11D 9/00**      **Compositions of detergents based essentially on soap ( compositions containing resin soap [C11D 15/04](#) )**

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

### **NOTE**

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

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

**C11D 10/00 Compositions of detergents, not provided for by one single preceding group**

- C11D 10/04 . based on mixture of surface-active non-soap compounds and soap
- C11D 10/042 .. { based on anionic surface-active compounds and soap }
- C11D 10/045 .. { based on non-ionic surface-active compounds and soap }
- C11D 10/047 .. { based on cationic surface-active compounds and soap }
  
- C11D 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 }**
  
- C11D 11/0005 . { Special cleaning and washing methods }
- C11D 11/0011 .. { characterised by the objects to be cleaned }
- C11D 11/0017 ... { "Soft" surfaces, e.g. textiles }
- C11D 11/0023 ... { "Hard" surfaces }
- C11D 11/0029 .... { Metals ( [degreasing metals C23G 5/00](#) ) }
- C11D 11/0035 .... { Glass; Plastics }
- C11D 11/0041 .... { Industrial or commercial equipment, e.g. reactors, tubes, engines ( [C11D 11/0047](#) takes precedence ) }
- C11D 11/0047 .... { Electronic devices, e.g. PCBs, semiconductors }
- C11D 11/0052 .... { Mineral surfaces, e.g. stones, frescoes, plaster, walls, concrete }
- C11D 11/0058 .. { involving the application of foam or a temporary coating on the surface to be cleaned }
- C11D 11/0064 .. { Multi-step methods }
- C11D 11/007 .. { involving applying energy, e.g. irradiation }
- C11D 11/0076 .. { Regeneration of cleaning solutions }
  
- C11D 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 }
- C11D 11/0088 .. { the liquefied ingredients being sprayed or adsorbed onto solid particles }
- C11D 11/0094 . { Process for making liquid detergent compositions, e.g. slurries, pastes, gels }
  
- C11D 11/02 . Preparation in the form of powder by spray drying
  
- C11D 11/04 . by chemical means, e.g. by sulfonating in the presence of other compounding ingredients followed by neutralising

**Guidance heading: Soap or soap-making; Resin soaps**

- C11D 13/00** **Making of soap or soap solutions in general; Apparatus therefor ( [resin soap C11D 15/00](#) )**
  
- C11D 13/02 . Boiling soap; Refining
- C11D 13/04 .. Continuous methods therefor
- C11D 13/06 .. Bleaching of soap or soap solutions

- C11D 13/08 . Colouring, { e.g. striated bars, striped bars } or perfuming
- C11D 13/10 . Mixing; Kneading
- C11D 13/12 . Cooling ( [C11D 13/14](#) takes precedence )
- C11D 13/14 . Shaping
- C11D 13/16 . . in moulds
- C11D 13/18 . . by extrusion or pressing
- C11D 13/20 . . in the form of small particles, e.g. powder, flakes ( by slicing [C11D 13/24](#) )
- C11D 13/22 . Cutting
- C11D 13/24 . . Slicing soap on the cooling drum
- C11D 13/26 . Drying ( drying ovens [F27](#) )
- C11D 13/28 . Embossing; Polishing
- C11D 13/30 . Recovery of soap, e.g. from spent solutions
- C11D 15/00      Manufacture of resin soap or soaps derived from naphthenic acids; Compositions**
- C11D 15/02 . Apparatus therefor
- C11D 15/04 . Compositions containing resin soap or soap derived from naphthenic acids
- C11D 17/00      Detergent materials characterised by their shape or physical properties { ( soaps [C11D 9/00](#), shaping soap [C11D 13/00](#) ) }**
- C11D 17/0004 . { Non aqueous liquid compositions comprising insoluble particles }
- C11D 17/0008 . { aqueous liquid non soap compositions ( [C11D 3/0015](#), [C11D 3/3947](#), [C11D 3/3956](#) take precedence ) }
- WARNING**
- This subgroup is not longer used for the classification of new documents from 01 November 2011
- C11D 17/0013 . . { Liquid compositions with insoluble particles in suspension ( [C11D 17/0021](#), [C11D 17/0026](#), [C11D 17/003](#) take precedence ) }
- C11D 17/0017 . . { Multi-phase liquid compositions }
- C11D 17/0021 . . . { Aqueous microemulsions }
- C11D 17/0026 . . { Structured liquid compositions, e.g. liquid crystalline phases, network containing non-Newtonian phase, ( thixotropic solutions [C11D 17/003](#) ) }
- C11D 17/003 . . { Colloidal solutions, e.g. gels; Thixotropic solutions; Pastes }
- C11D 17/0034 . { Fixed on a solid conventional detergent ingredient }
- C11D 17/0039 . { Coated compositions or coated components in the compositions, (micro)capsules }

- C11D 17/0043 . { For use with aerosol devices }
- C11D 17/0047 . { Detergents in the form of bars or tablets }
- C11D 17/0052 .. { Cast detergent compositions }
- C11D 17/0056 .. { Lavatory cleansing blocks }
- C11D 17/006 .. { containing mainly surfactants, but no builders, e.g. syndet bar }
- C11D 17/0065 .. { Solid detergents containing builders ( [C11D 17/06](#) takes precedence ) }
- C11D 17/0069 ... { Laundry bars }
- C11D 17/0073 ... { Tablets }
- C11D 17/0078 .... { Multilayered tablets }
- C11D 17/0082 .... { Coated tablets }
- C11D 17/0086 .... { Laundry tablets }
- C11D 17/0091 .... { Dishwashing tablets }
- C11D 17/0095 . { Solid transparent soaps or detergents }
- C11D 17/02 . Floating bodies of detergents { or of soaps }
- C11D 17/04 . combined with or containing other objects
- C11D 17/041 .. { Compositions releasably affixed on a substrate or incorporated into a dispensing means }
- C11D 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](#) ) }
- C11D 17/043 .... { Liquid or thixotropic (gel) compositions }
- C11D 17/044 .... { Solid compositions }
- C11D 17/045 .... { Multi-compartment }
- C11D 17/046 ... { Insoluble free body dispenser }
- C11D 17/047 ... { Arrangements specially adapted for dry cleaning or laundry dryer related applications }
- C11D 17/048 .. { Soap or detergent bars or cakes with an inner core consisting of insoluble material ( floating soaps [C11D 17/02](#) ) }
- C11D 17/049 .. { Cleaning or scouring pads; Wipes }
- C11D 17/06 . Powder; Flakes; Free-flowing mixtures; Sheets
- C11D 17/065 .. { High-density particulate detergent compositions }
- C11D 17/08 . Liquid soap, { e.g. for dispensers }; Capsuled
- C11D 19/00** **Recovery of glycerol from a saponification liquor ( refining glycerol [C07C 31/22](#) )**
- C11D 2003/00** **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

- C11D 2003/16 . Organic compounds
- C11D 2003/26 . . containing nitrogen { ( [C11D 3/162](#), [C11D 3/164](#), [C11D 3/166](#), [C11D 3/168](#) take precedence ) }
- C11D 2003/32 . . . Amides; Substituted amides
- [C11D 2003/326](#) . . . . { granulated, coated or protected }