

**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](#)

**Guidance heading:****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 . . . {Acylisethionates }
- 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 { (C11D 1/002, C11D 1/004, C11D 1/008 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 }

**C11D 3/00**      **Other compounding ingredients of detergent compositions covered in group [C11D 1/00](#)**

**NOTE**

Documents classified in group [C11D 3/0005](#) are also classified in other groups of subclass [C11D](#) according to the chemical nature of the compounds as such

- 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 $\text{NaMeSixO}_{2x+1}\text{YH}_2\text{O}$ }
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 ( <a href="#">dyes, pigments 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 ( <a href="#">soaps C11D 10/06 to 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 { ( <a href="#">graft polymers 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; { <a href="#">Quaternized amines</a> }
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, sulfolanones }
<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, polyalkyleneimines }
<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>	.....	{ Alkoxyated 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; Polyarylelefins; Halogenated polyarylelefins }



C11D 3/3753	....	{Polyvinylalcohol; Ethers or esters thereof }
C11D 3/3757	....	{{(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 }
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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	...	{Stablising 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; {Pigments }
C11D 3/42	..	Brightening agents; {Blueing agents }
C11D 3/43	.	Solvents
C11D 3/48	.	Medical, disinfecting agents, disinfecting, antibacterial, germicidal or antimicrobial compositions
C11D 3/485	..	{ Halophors, e.g. iodophors }
C11D 3/50	.	Perfumes
C11D 3/502	..	{Protected perfumes }
C11D 3/505	...	{encapsulated or adsorbed on a carrier, e.g. zeolite or clay }
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.

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

**Guidance heading:**



**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 }