

**CPC****COOPERATIVE PATENT CLASSIFICATION****C08K****USE OF INORGANIC OR NON-MACROMOLECULAR ORGANIC SUBSTANCES AS COMPOUNDING INGREDIENTS** (pesticides, herbicides

A01N; pharmaceuticals, cosmetics A61K; explosives C06B; paints, inks, varnishes, dyes, polishes, adhesives C09; lubricants C10M; detergents C11D; artificial filaments or fibres D01F; textile treating compositions D06)

**NOTE**

1. The use of an ingredient for a specific polymer is classified by adding, in a C-set, to the group symbol of C08K, the subdivision of [C08L 1/00](#) to [C08L 99/00](#). Example: Polystyrene containing a carboxylic amide is classified in ([C08K 5/20](#), [C08L 25/06](#)). 2. From April 2012, the use of an ingredient for a specific polymer is classified by adding, in a C-set, to the group symbol of C08K, the subdivision of [C08L 1/00](#) to [C08L 99/00](#). Example: Polystyrene containing a carboxylic amide is classified in ([C08K 5/20](#), [C08L 25/06](#)). 3. In this subclass, in the absence of an indication to the contrary, an ingredient is classified in the last appropriate place.

In this subclass:

- a mixture of ingredients is classified in the most indented group covering all the essential ingredients of the mixture, e.g.:

- a mixture of a monohydric and a polyhydric alcohol [C08K 5/05](#)
- a mixture of two polyhydric alcohols [C08K 5/053](#)
- a mixture of an alcohol and an ether [C08K 5/04](#)
- a mixture of an ether and an amine [C08K 5/00](#)
- a mixture of an amine and a metal [C08K 13/02](#)

{ This note is applied only for mixtures with more than three essential ingredients. Mixtures with two or three ingredients are classified in the appropriate groups of C08K, e.g. a mixture of Al<sub>2</sub>O<sub>3</sub>, an ether and an amine is classified in [C08K 3/22](#), [C08K 5/06](#) and [C08K 5/17](#) }

- ammonium salts are classified in the same way as metal salts

In this subclass, organic acid salts, alcoholates, phenolates or mercaptides are classified in the groups or subgroups of the parent compounds

The use of an ingredient for a specific polymer is classified by adding to the group symbol of C08K and separated therefrom by a "+" sign, the subdivision of [C08L 1/00](#) to [C08L 99/00](#).

Example: Polystyrene containing a carboxylic amide is classified in [C08K 5/20+L25/06](#)

In this subclass are considered as compounding ingredients:  
inert additives

radical crosslinking agents, e.g. peroxides, S-containing vulcanisation agents

coupling agents, i.e. compounds able to improve the adhesion between filler and macromolecule

Are not considered as compounding ingredients:

chemical modifying or crosslinking agents which react via a condensation or addition mechanism (for C08B polymers C08B, for diene rubbers [C08C 19/30](#), for other vinyl polymers C08F8/-, for polysiloxanes [C08L 83/00](#), for other C08G

polymers C08G)

solvents or dispersion agents for making polymer solutions, emulsions or dispersions ([C08J 3/02](#))

blowing agents ([C08J 9/04](#))

### **WARNING**

The following IPC group is not used in the internal ECLA classification system. Subject matter covered by this group is classified in the following ECLA groups:

**C08K 4/5445** covered by [C08K 5/544](#)

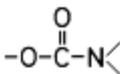
## **C08K 3/00**

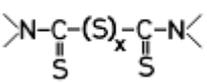
### **Use of inorganic ingredients**

- C08K 3/0008 . {Inorganic ingredients according to more than one of the "one dot" groups of [C08K 3/02](#) to [C08K 3/40](#)}
- C08K 3/0016 .. {Crosslinking or vulcanising agents, including accelerators}
- C08K 3/0025 .. {Additives activating the degradation of the macromolecular compound}
- C08K 3/0033 .. {Fillers, pigments, reinforcing additives}
- C08K 3/0041 .. {Stabilisers against oxidation, heat, light, ozone}
- C08K 3/005 .. { Biocides; (macromolecular substances as carriers for biocide material [A01N 25/10](#))}
- C08K 3/0058 .. {Flame-proofing or flame-retarding additives}
- C08K 3/0066 .. {Antistatics}
- C08K 3/0075 . {Metal containing compounds according to more than one of the "one dot" groups of [C08K 3/10](#) to [C08K 3/40](#)}
- C08K 3/0083 .. {Compounds containing metals of the 1st to 3rd Group of the Periodic system}
- C08K 3/0091 .. {Compounds containing metals of the 4th to 8th Group of the Periodic system, e.g. nickel compounds}
- C08K 3/02 . Elements
- C08K 3/04 .. Carbon
- C08K 3/06 .. Sulfur
- C08K 3/08 .. Metals
- C08K 3/10 . Metal compounds
- C08K 3/12 .. Hydrides
- C08K 3/14 .. Carbides
- C08K 3/16 . Halogen-containing compounds

- C08K 3/18 . Oxygen-containing compounds, e.g. metal carbonyls
- C08K 3/20 .. Oxides; Hydroxides
- C08K 3/22 ... of metals
- C08K 3/2279 .... {of antimony}
- C08K 3/24 .. Acids; Salts thereof {(C08K 3/16 takes precedence)}
- C08K 3/26 ... Carbonates; Bicarbonates
  
- C08K 3/28 . Nitrogen-containing compounds
  
- C08K 3/30 . Sulfur-, selenium- or tellurium-containing compounds
  
- C08K 3/32 . Phosphorus-containing compounds
  
- C08K 3/34 . Silicon-containing compounds
- C08K 3/346 .. {Clay}
- C08K 3/36 .. Silica
  
- C08K 3/38 . Boron-containing compounds
  
- C08K 3/40 . Glass
  
- C08K 5/00            Use of organic ingredients**
  
- C08K 5/0008 . {Organic ingredients according to more than one of the "one dot" groups of [C08K 5/01](#) to [C08K 5/59](#)}
- C08K 5/0016 .. {Plasticisers}
- C08K 5/0025 .. { Crosslinking or vulcanising agents; including accelerators}
- C08K 5/0033 .. {Additives activating the degradation of the macromolecular compound}
- C08K 5/0041 .. {Optical brightening agents, organic pigments}
- C08K 5/005 .. {Stabilisers against oxidation, heat, light, ozone}
- C08K 5/0058 .. { Biocides; (macromolecular substances as carriers for biocide material [A01N 25/10](#))}
- C08K 5/0066 .. {Flame-proofing or flame-retarding additives}
- C08K 5/0075 .. {Antistatics}
- C08K 5/0083 .. {Nucleating agents promoting the crystallisation of the polymer matrix}
  
- C08K 5/0091 . {Complexes with metal-heteroatom-bonds}
  
- C08K 5/01 . Hydrocarbons {(C08K 5/0091 takes precedence)}
  
- C08K 5/02 . Halogenated hydrocarbons {(C08K 5/0091 takes precedence)}
- C08K 5/03 .. aromatic, {e.g. C6H5-CH2-Cl}
  
- C08K 5/04 . Oxygen-containing compounds {(C08K 5/0091 takes precedence)}
- C08K 5/05 .. Alcohols; Metal alcoholates
- C08K 5/053 ... Polyhydroxylic alcohols

- C08K 5/057     ...     Metal alcoholates {(metal enolates [C08K 5/0091](#))}
- C08K 5/06     ..     Ethers; Acetals; Ketals; Ortho-esters
- C08K 5/07     ..     Aldehydes; Ketones
- C08K 5/08     ...     Quinones
- C08K 5/09     ..     Carboxylic acids; Metal salts thereof; Anhydrides thereof
- C08K 5/092    ...     Polycarboxylic acids
- C08K 5/095    ...     Carboxylic acids containing halogens
- C08K 5/098    ...     Metal salts of carboxylic acids
- C08K 5/10     ..     Esters; Ether-esters
- C08K 5/101    ...     of monocarboxylic acids
- C08K 5/103    ....     with polyalcohols
- C08K 5/105    ....     with phenols
- C08K 5/107    .....     with polyphenols
- C08K 5/109    ...     of carbonic acid, { e.g. R-O-C(=O)-O-R }
- C08K 5/11     ...     of acyclic polycarboxylic acids
- C08K 5/12     ...     of cyclic polycarboxylic acids
- C08K 5/13     ..     Phenols; Phenolates
- C08K 5/132    ...     Phenols containing keto groups, {e.g. benzophenones}
- C08K 5/134    ...     Phenols containing ester groups
- C08K 5/1345    .....     {Carboxylic esters of phenolcarboxylic acids}
- C08K 5/136    ...     Phenols containing halogens
- C08K 5/138    ...     Phenolates
- C08K 5/14     ..     Peroxides
- C08K 5/15     ..     Heterocyclic compounds having oxygen in the ring
- C08K 5/151    ...     having one oxygen atom in the ring
- C08K 5/1515    ....     Three-membered rings
- C08K 5/1525    ....     Four-membered rings
- C08K 5/1535    ....     Five-membered rings
- C08K 5/1539    .....     Cyclic anhydrides
- C08K 5/1545    ....     Six-membered rings
- C08K 5/156    ...     having two oxygen atoms in the ring
- C08K 5/1565    ....     Five-membered rings
- C08K 5/1575    ....     Six-membered rings
- C08K 5/159    ...     having more than two oxygen atoms in the ring
  
- C08K 5/16     .     Nitrogen-containing compounds {(C08K 5/0091 takes precedence)}
- C08K 5/17     ..     Amines; Quaternary ammonium compounds
- C08K 5/175    ...     {containing COOH-groups; Esters or salts thereof}
- C08K 5/18     ...     with aromatically bound amino groups
- C08K 5/19     ...     Quaternary ammonium compounds
- C08K 5/20     ..     Carboxylic acid amides

- C08K 5/205 .. Compounds containing  groups, e.g. carbamates
- C08K 5/21 .. Urea; Derivatives thereof, e.g. biuret
- C08K 5/22 .. Compounds containing nitrogen bound to another nitrogen atom
- C08K 5/23 ... Azo-compounds
- C08K 5/235 ..... {Diazo and polyazo compounds}
- C08K 5/24 ... Derivatives of hydrazine
- C08K 5/25 ..... Carboxylic acid hydrazides
- C08K 5/26 ..... Semicarbazides
- C08K 5/27 ... Compounds containing a nitrogen atom bound to two other nitrogen atoms, e.g. diazoamino-compounds
- C08K 5/28 ..... Azides
- C08K 5/29 .. Compounds containing {one or more} carbon-to-nitrogen double bonds
- C08K 5/30 ... Hydrazones; Semicarbazones
- C08K 5/31 ... Guanidine; Derivatives thereof
- C08K 5/315 .. Compounds containing carbon-to-nitrogen triple bonds
- C08K 5/3155 ... {Dicyandiamide}
- C08K 5/32 .. Compounds containing nitrogen bound to oxygen
- C08K 5/33 ... Oximes
- C08K 5/34 .. Heterocyclic compounds having nitrogen in the ring
- C08K 5/3412 ... having one nitrogen atom in the ring
- C08K 5/3415 ..... Five-membered rings
- C08K 5/3417 ..... condensed with carbocyclic rings
- C08K 5/3432 ..... Six-membered rings
- C08K 5/3435 ..... Piperidines
- C08K 5/3437 ..... condensed with carbocyclic rings
- C08K 5/3442 ... having two nitrogen atoms in the ring
- C08K 5/3445 ..... Five-membered rings
- C08K 5/3447 ..... condensed with carbocyclic rings
- C08K 5/3462 ..... Six-membered rings
- C08K 5/3465 ..... condensed with carbocyclic rings
- C08K 5/3467 ... having more than two nitrogen atoms in the ring
- C08K 5/3472 ..... Five-membered rings
- C08K 5/3475 ..... condensed with carbocyclic rings
- C08K 5/3477 ..... Six-membered rings
- C08K 5/3492 ..... Triazines
- C08K 5/34922 ..... {Melamine; Derivatives thereof}
- C08K 5/34924 ..... {containing cyanurate groups; Tautomers thereof}
- C08K 5/34926 ..... {also containing heterocyclic groups other than triazine groups}
- C08K 5/34928 ..... {Salts}
- C08K 5/3495 ..... condensed with carbocyclic rings

- C08K 5/35 ... having also oxygen in the ring
- C08K 5/353 .... Five-membered rings
- C08K 5/357 .... Six-membered rings
- C08K 5/36 . Sulfur-, selenium-, or tellurium-containing compounds {(C08K 5/0091 takes precedence)}
- C08K 5/37 .. Thiols
- C08K 5/372 ... Sulfides, {e.g. R-(S)<sub>x</sub>-R'}
- C08K 5/3725 .... {containing nitrogen}
- C08K 5/375 ... containing six-membered aromatic rings {(C08K 5/3725 takes precedence)}
- C08K 5/378 ... containing heterocyclic rings
- C08K 5/38 .. Thiocarbonic acids; Derivatives thereof, e.g. xanthates; { i.e. compounds containing -X-C(=X)- groups, X being oxygen or sulfur, at least one X being sulfur}
- C08K 5/39 .. Thiocarbamic acids; Derivatives thereof, e.g. dithiocarbamates
- C08K 5/40 ... Thiurams, {i.e. compounds containing  groups}
- C08K 5/405 ... Thioureas; Derivatives thereof
- C08K 5/41 .. Compounds containing sulfur bound to oxygen
- C08K 5/42 ... Sulfonic acids; Derivatives thereof
- C08K 5/43 .. Compounds containing sulfur bound to nitrogen
- C08K 5/435 ... Sulfonamides
- C08K 5/44 ... Sulfenamides
- C08K 5/45 .. Heterocyclic compounds having sulfur in the ring
- C08K 5/46 ... with oxygen or nitrogen in the ring
- C08K 5/47 .... Thiazoles
- C08K 5/48 .. Selenium- or tellurium-containing compounds
- C08K 5/49 . Phosphorus-containing compounds {(C08K 5/0091 takes precedence)}
- C08K 5/50 .. Phosphorus bound to carbon only
- C08K 5/51 .. Phosphorus bound to oxygen
- C08K 5/52 ... Phosphorus bound to oxygen only
- C08K 5/5205 .... {Salts of P-acids with N-bases}
- C08K 5/521 .... Esters of phosphoric acids, e.g. of H<sub>3</sub>PO<sub>4</sub>
- C08K 5/523 ..... with hydroxyaryl compounds
- C08K 5/524 .... Esters of phosphorous acids, e.g. of H<sub>3</sub>PO<sub>3</sub>
- C08K 5/526 ..... with hydroxyaryl compounds
- C08K 5/527 .... Cyclic esters
- C08K 5/529 .... Esters containing heterocyclic rings not representing cyclic esters of phosphoric or phosphorous acids
- C08K 5/53 ... bound to oxygen and to carbon only
- C08K 5/5313 .... Phosphinic compounds, e.g. R<sub>2</sub>=P(:O)OR'
- C08K 5/5317 .... Phosphonic compounds, e.g. R-P(:O)(OR')<sub>2</sub>
- C08K 5/5333 ..... Esters of phosphonic acids

- C08K 5/5337 ..... containing also halogens
- C08K 5/5353 ..... containing also nitrogen
- C08K 5/5357 ..... cyclic
- C08K 5/5373 ..... containing heterocyclic rings not representing cyclic esters of phosphonic acids
- C08K 5/5377 .... Phosphinous compounds, e.g. R<sub>2</sub>=P-OR`
- C08K 5/5393 .... Phosphonous compounds, e.g. R-P(OR`)<sub>2</sub>
- C08K 5/5397 .... Phosphine oxides
- C08K 5/5398 .. Phosphorus bound to sulfur
- C08K 5/5399 .. Phosphorus bound to nitrogen
- C08K 5/54 . Silicon-containing compounds {(C08K 5/0091 takes precedence)}
- C08K 5/5403 .. {containing no other elements than carbon or hydrogen}
- C08K 5/5406 .. {containing elements other than oxygen or nitrogen}
- C08K 5/541 .. containing oxygen
- C08K 5/5415 ... containing at least one Si-O bond
- C08K 5/5419 ..... containing at least one Si-C bond
- C08K 5/5425 ... containing at least one C=C bond
- C08K 5/5435 ... containing oxygen in a ring
- C08K 5/544 .. containing nitrogen
- C08K 5/5442 ... {containing nitrogen in a heterocyclic ring}
- C08K 5/5455 ... containing at least one  group {(C08K 5/5442 takes precedence)}
- C08K 5/5465 ... containing at least one C=N bond {(C08K 5/5442 takes precedence)}
- C08K 5/5475 ... containing at least one C-N {triple} bond {(C08K 5/5442 takes precedence)}
- C08K 5/548 .. containing sulfur {(C08K 5/5442 takes precedence)}
- C08K 5/549 .. containing silicon in a ring
- C08K 5/55 . Boron-containing compounds {(C08K 5/0091 takes precedence)}
- C08K 5/56 . Organo-metallic compounds, i.e. organic compounds containing a metal-to-carbon bond
- C08K 5/57 .. Organo-tin compounds
- C08K 5/58 ... containing sulfur
- C08K 5/59 . Arsenic- or antimony-containing compounds
- C08K 7/00 Use of ingredients characterised by shape**
- C08K 7/02 . Fibres or whiskers

- C08K 7/04 . . . Inorganic
- C08K 7/06 . . . . Elements
- C08K 7/08 . . . . Oxygen-containing compounds
- C08K 7/10 . . . . Silicon-containing compounds
- C08K 7/12 . . . . . Asbestos
- C08K 7/14 . . . . Glass
  
- C08K 7/16 . Solid spheres
- C08K 7/18 . . . Inorganic
- C08K 7/20 . . . . Glass
  
- C08K 7/22 . Expanded, porous or hollow particles
- C08K 7/24 . . . Inorganic
- C08K 7/26 . . . . Silicon- containing compounds
- C08K 7/28 . . . . Glass

#### **C08K 9/00 Use of pretreated ingredients**

- C08K 9/02 . Ingredients treated with inorganic substances
- C08K 9/04 . Ingredients treated with organic substances {[treated with macromolecular compounds C08K 9/08](#)}
- C08K 9/06 . . . with silicon-containing compounds
- C08K 9/08 . Ingredients agglomerated by treatment with a binding agent
- C08K 9/10 . Encapsulated ingredients
- C08K 9/12 . Adsorbed ingredients {, [e.g. ingredients on carriers](#)}

#### **C08K 11/00 Use of ingredients of unknown constitution, e.g. undefined reaction products**

- C08K 11/005 . {[Waste materials, e.g. treated or untreated sewage sludge](#)}

#### **C08K 13/00 Use of mixtures of ingredients not covered by one single of the preceding main groups, each of these compounds being essential**

- C08K 13/02 . Organic and inorganic ingredients
- C08K 13/04 . Ingredients characterised by their shape and organic or inorganic ingredients
- C08K 13/06 . Pretreated ingredients and ingredients covered by the main groups [C08K 3/00](#) to [C08K 7/00](#)
- C08K 13/08 . Ingredients of unknown constitution and ingredients covered by the main groups [C08K 3/00](#) to [C08K 9/00](#)

<b>C08K 2003/00</b>	<b>Use of inorganic ingredients</b>
C08K 2003/02	. Elements
C08K 2003/023	.. { Silicon}
C08K 2003/026	.. { Phosphorus}
C08K 2003/04	.. Carbon
C08K 2003/045	... { Fullerenes}
C08K 2003/08	.. Metals
C08K 2003/0806	... { Silver}
C08K 2003/0812	... { Aluminium}
C08K 2003/0818	... { Alkali metal}
C08K 2003/0825	.... [ N: Potassium]
C08K 2003/0831	... { Gold}
C08K 2003/0837	... { Bismuth}
C08K 2003/0843	... { Cobalt}
C08K 2003/085	... { Copper}
C08K 2003/0856	... { Iron}
C08K 2003/0862	... { Nickel}
C08K 2003/0868	... { Osmium}
C08K 2003/0875	... { Antimony}
C08K 2003/0881	... { Titanium}
C08K 2003/0887	... { Tungsten}
C08K 2003/0893	... { Zinc}
C08K 2003/16	. Halogen-containing compounds
C08K 2003/162	.. { Calcium, strontium or barium halides, e.g. calcium, strontium or barium chloride }
C08K 2003/164	.. { Aluminum halide, e.g. aluminium chloride}
C08K 2003/166	.. { Magnesium halide, e.g. magnesium chloride}
C08K 2003/168	.. { Zinc halides}
C08K 2003/18	. Oxygen-containing compounds, e.g. metal carbonyls
C08K 2003/20	.. Oxides; Hydroxides
C08K 2003/22	... of metals
C08K 2003/2203	.... { of lithium}
C08K 2003/2206	.... { of calcium, strontium or barium}
C08K 2003/221	.... { of rare earth metal }
C08K 2003/2213	..... { of cerium}
C08K 2003/2217	.... { of magnesium}
C08K 2003/222	..... { Magnesia, i.e. magnesium oxide}
C08K 2003/2224	..... { Magnesium hydroxide}
C08K 2003/2227	.... { of aluminium}
C08K 2003/2231	.... { of tin}

C08K 2003/2234	....	{ of lead}
C08K 2003/2237	....	{ of titanium}
C08K 2003/2241	.....	{ Titanium dioxide}
C08K 2003/2244	.....	{ of zirconium}
C08K 2003/2248	....	{ of copper}
C08K 2003/2251	....	{ of chromium}
C08K 2003/2255	....	{ of molybdenum}
C08K 2003/2258	....	{ of tungsten}
C08K 2003/2262	....	{ of manganese}
C08K 2003/2265	....	{ of iron}
C08K 2003/2268	.....	{ Ferrous oxide (FeO)}
C08K 2003/2272	.....	{ Ferric oxide (Fe <sub>2</sub> O <sub>3</sub> )}
C08K 2003/2275	.....	{ Ferroso-ferric oxide (Fe <sub>3</sub> O <sub>4</sub> )}
C08K 2003/2279	....	{of antimony}
C08K 2003/2282	.....	{ Antimonates}
C08K 2003/2286	....	{ of silver}
C08K 2003/2289	....	{ of cobalt}
C08K 2003/2293	....	{ of nickel }
C08K 2003/2296	....	{ of zinc}
C08K 2003/24	..	Acids; Salts thereof {(C08K 3/16 takes precedence)}
C08K 2003/26	...	Carbonates; Bicarbonates
C08K 2003/262	....	{ Alkali metal carbonates}
C08K 2003/265	....	{ Calcium, strontium or barium carbonate}
C08K 2003/267	....	{ Magnesium carbonate}
C08K 2003/28	.	Nitrogen-containing compounds
C08K 2003/282	..	{ Binary compounds of nitrogen with aluminium}
C08K 2003/285	..	{ Ammonium nitrates}
C08K 2003/287	..	{ Calcium, strontium or barium nitrates}
C08K 2003/30	.	Sulfur-, selenium- or tellurium-containing compounds
C08K 2003/3009	..	{ Sulfides}
C08K 2003/3018	...	{ of magnesium, calcium, strontium or barium}
C08K 2003/3027	...	{ of cadmium}
C08K 2003/3036	...	{ of zinc }
C08K 2003/3045	..	{ Sulfates}
C08K 2003/3054	...	{ Ammonium sulfates}
C08K 2003/3063	...	{ Magnesium sulfate}
C08K 2003/3072	...	{ Iron sulfates}
C08K 2003/3081	...	{ Aluminum sulfate}
C08K 2003/309	..	{ Sulfur containing acids}
C08K 2003/32	.	Phosphorus-containing compounds

- C08K 2003/321 .. { Phosphates}
- C08K 2003/322 ... { Ammonium phosphate}
- C08K 2003/323 .... { Ammonium polyphosphate}
- C08K 2003/324 ... { Alkali metal phosphate}
- C08K 2003/325 ... { Calcium, strontium or barium phosphate}
- C08K 2003/326 ... { Magnesium phosphate}
- C08K 2003/327 ... { Aluminium phosphate}
- C08K 2003/328 ... { Phosphates of heavy metals}
- C08K 2003/329 .. { Phosphorus containing acids}
  
- C08K 2003/34 . Silicon-containing compounds
- C08K 2003/343 .. { Peroxyhydrates, peroxyacids or salts thereof}
  
- C08K 2003/38 . Boron-containing compounds
- C08K 2003/382 .. { and nitrogen}
- C08K 2003/385 ... { Binary compounds of nitrogen with boron}
- C08K 2003/387 .. { Borates}

#### **C08K 2201/00 Specific properties of additives**

- C08K 2201/001 . Conductive additives
  
- C08K 2201/002 . Physical properties
- C08K 2201/003 .. Additives being defined by their diameter
- C08K 2201/004 .. Additives being defined by their length
- C08K 2201/005 .. Additives being defined by their particle size in general
- C08K 2201/006 .. Additives being defined by their surface area
  
- C08K 2201/007 . Fragrance additive
  
- C08K 2201/008 . Additives improving gas barrier properties
  
- C08K 2201/009 . Additives being defined by their hardness
  
- C08K 2201/01 . Magnetic additives
  
- C08K 2201/011 . Nanostructured additives
  
- C08K 2201/012 . Additives improving oxygen scavenging properties
  
- C08K 2201/013 . Additives applied to the surface of polymers or polymer particles
  
- C08K 2201/014 . Additives containing two or more different additives of the same subgroup in C08K
  
- C08K 2201/015 . Additives for heat shrinkable compositions

- [C08K 2201/016](#) . Additives defined by their aspect ratio
- [C08K 2201/017](#) . Additives being an antistatic agent
- [C08K 2201/018](#) . Additives for biodegradable polymeric composition
- [C08K 2201/019](#) . the composition being defined by the absence of a certain additive