# C09J

# ADHESIVES; NON-MECHANICAL ASPECTS OF ADHESIVE PROCESSES IN GENERAL; ADHESIVE PROCESSES NOT PROVIDED FOR ELSEWHERE; USE OF MATERIALS AS ADHESIVES (preparation of glue or gelatine <u>C09H</u>)

# **Definition statement**

#### This place covers:

Adhesives and adhesive processes (but see below for adhesive processes), including adhesives characterised by their physical nature or by the effects produced;

Adhesives based on polysaccharides or their derivatives, based on rubbers or their derivatives, based on natural or unspecified macromolecular compounds or their derivatives, or based on organic macromolecular compounds, obtained by (or obtained otherwise than by) reactions only involving carbon-to-carbon unsaturated bonds;

Adhesives based on inorganic substances or on organic non-macromolecular compounds having at least one polymerisable carbon-to-carbon unsaturated bond;

Adhesives in the form of films or foils, including releasable films;

Heat seal adhesives and hot melts;

Use of materials as adhesives, e.g. the use of known or new polymers or products;

Other features of adhesives, e.g. additives for adhesives.

# **Relationships with other classification places**

This subclass is residual in respect of adhesive processes. Please see the "References out of a residual place" section below, for details of other places for classifying some adhesive processes.

In cases where an adhesive contains an organic non-macromolecular compound as an additive but not as an essential ingredient, and such a compound is of interest, classification could be made in  $\underline{C08K}$  or as an additive in  $\underline{C08J 3/00}$  or  $\underline{C09J 11/02}$ . This may be in addition to classification in  $\underline{C09J 123/00}$  -  $\underline{C09J 149/00}$ .

Processes for applying liquids or other fluent materials to surfaces in general are classified in <u>B05D</u>.

Organic dyes or closely-related compounds for producing dyes, mordants or lakes per se, are classified in <u>C09B</u>.

Treatment of inorganic materials other than fibrous fillers used as pigments or fillers is classified in <u>C09C</u>.

Natural resins, French polish, drying-oils, driers, turpentine, per se, are classified in CO9F.

Relationship between CO8F, CO8G, CO8L, CO9D and CO9J:

Macromolecular compounds as such are classified in  $\underline{C08F}$  or  $\underline{C08G}$ . Compositions of macromolecular compounds are classified in  $\underline{C08L}$ . Coating compositions or adhesive compositions are classified in  $\underline{C09D}$  and  $\underline{C09J}$ , respectively.

<u>C09D</u> and <u>C09J</u> are seen as "related fields" of <u>C08L</u> this structure has implications on search and classification.

For classification:

If the claims only pertain to an "adhesive composition...", only the C09J class is given.

If the claims pertain to a composition as such and to an adhesive (For example, "composition for use as an adhesive..."), both the <u>C09J</u> class and the corresponding <u>C08L</u> class are given.

For searching both classes are to be searched, regardless of the wording of the claims, since in many documents of <u>C08L</u>, a passage relating to the use of the composition for an adhesive can be found.

#### References

#### **Limiting references**

This place does not cover:

Preparation of glue or gelatine	<u>C09H</u>
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#### **Application-oriented references**

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Electrically conductive adhesives specially adapted for use in therapy or testing in vivo	<u>A61K 9/0009</u>
Adhesive bandages, dressings or absorbent pads	<u>A61L 15/16</u>
Surgical adhesives	<u>A61L 24/00</u>
Joining of preformed parts; Apparatus therefor using adhesives	B29C 65/48
Layered products characterised by the relation between layers, i.e. products essentially comprising layers having different physical properties or products characterised by the interconnection of layers where at least one layer has inter-reactive properties	<u>B32B 7/10</u>
Layered products characterised by the relation between layers, i.e. products essentially comprising layers having different physical properties or products characterised by the use of interposed adhesives or interposed materials with adhesive properties	<u>B32B 7/12</u>
Cling foils	<u>C08J 5/00</u>
Bonding of a preformed macromolecular material to the same or other solid material such as metal, glass, leather, e.g. using adhesives	<u>C08J 5/12</u>
Using adhesives in the production of multi-layer textile fabrics	D06M 17/00
Adhesive labels, tag tickets or similar identification or indication means	<u>G09F 3/10</u>

### References out of a residual place

Examples of places in relation to which this place is residual:

Devices for applying liquids, e.g. adhesives, to surfaces, including wood surfaces, to be joined	<u>B05B, B05C, B27G 11/00</u>
Processes for applying liquids or other fluent materials, e.g. adhesives, to surfaces in general	<u>B05D</u>
Bonding of non-plastics to plastics or bonding substances in a plastic state in general	<u>B29C</u>
Labelling fabrics or comparable materials or articles with deformable surface using adhesives and thermo-activatable adhesives, respectively	<u>B65C 5/02, B65C 5/04</u>
Joining glass to glass or to other materials	<u>C03C 27/00</u>

### Informative references

Attention is drawn to the following places, which may be of interest for search:

Containers, packaging elements or packages for web or tape-like material, e.g. dispenser for dispensing tape	<u>B65D 85/67</u>
Polishing compositions, ski waxes	<u>C09G</u>
Soaps, detergent compositions	<u>C11D</u>
Connecting constructional elements or machine parts by sticking or pressing them together, e.g. cold pressure welding	<u>F16B 11/00</u>

# **Special rules of classification**

Classification guidance:

- In this subclass, adhesives containing specific organic macromolecular substances are classified only according to the macromolecular substance, non-macromolecular substances not being taken into account.
- Example: an adhesive containing polyethene and amino-propyltrimethoxysilane is classified in group <u>C09J 123/06</u>.
- However, adhesives containing combinations of organic non-macromolecular compounds having at least one polymerisable carbon-to-carbon unsaturated bond with prepolymers or polymers other than unsaturated polymers of groups <u>C09J 159/00</u> - <u>C09J 187/00</u> are classified according to the unsaturated non-macromolecular component in group <u>C09J 4/06</u>.
- Example: an adhesive containing polyethene and styrene monomer is classified in group <u>C09J 4/06</u>.
- Aspects relating to the physical nature of the adhesives or to the effects produced, as defined in group <u>C09J 9/00</u>, if clearly and explicitly stated, are also classified in this subclass.
- Unspecified adhesives (when the macromolecular constituent is not specified) characterised by additives are classified in group <u>C09J 11/00</u>.
- In this subclass, adhesives comprising two or more macromolecular constituents are classified according to the macromolecular constituent or constituents present in the highest proportion, i.e. the constituent on which the composition is based. If the composition is based on two or more constituents, present in equal proportions, the adhesive is classified according to each of these constituents.
- Example: an adhesive containing 80 parts of polyethene and 20 parts of polyvinylchloride is classified in group <u>C09J 123/06</u>. An adhesive containing 40 parts of polyethene and 40 parts of polyvinylchloride is classified in groups <u>C09J 123/06</u> and <u>C09J 127/06</u>.
- In groups <u>C09J 101/00</u> <u>C09J 201/00</u>, any macromolecular constituent of an adhesive which is not identified by the classification according to Note (3) after the title of subclass <u>C09J</u>, and the use of which is determined to be novel and non-obvious, must also be classified in a group chosen from groups <u>C09J 101/00</u> <u>C09J 201/00</u>.
- In groups <u>C09J 123/00</u> <u>C09J 149/00</u>, in the absence of an indication to the contrary, a copolymer is classified according to the major monomeric component.
- In groups <u>C09J 165/00</u> <u>C09J 185/00</u>, in the absence of an indication to the contrary, adhesives based on macromolecular compounds obtained by reactions forming two different linkages in the main chain are classified only according to the linkage present in excess.
- When the adhesive is a specified organic polymer, classification is given in <u>C09J 101/00</u> - <u>C09J 201/00</u>. When the adhesive is a specified inorganic constituent, classification is given in <u>C09D 1/00</u>.
- Adhesive compositions containing a single polymer and an inorganic or non-macromolecular organic additive as compounding agent are not classified in <u>C08K</u>, but in the <u>C09J</u> subclass together with the corresponding symbol in <u>C08K</u> in the form of C-Sets (i.e. #C9Je).
- Adhesive compositions containing specific organic macromolecular substances are classified according to the macromolecular substance.

• Adhesive compositions comprising specific macromolecular substances with other macromolecular substances and/or non-macromolecular substances are also classified under the form of C-Sets as explained below.

Allocation of indexing codes:

• Orthogonal Indexing codes may be allocated in conjunction with combination-set symbols. In these situations, allocations of specific indexing codes are indicated with the related C-Sets in C-Sets classification.

#### Combination sets (C-Sets):

In this subclass, C-Sets classification is applied to the following groups, listed in the table below, if the document discloses a pertinent combination of technical features that cannot be covered by the allocation of a single symbol. The fourth column of the table indicates the place where the detailed information about the C-Sets construction and the associated syntax rules can be found, in the section Special rules of classification.

C-SETS ID	BASE SYMBOLS	SUBSEQUENT SYMBOLS	C-SETS FORMULA; LOCATION OF C-SETS RULES
#C9Ja	<u>C09J 4/00</u>	C08F 210/00 - C08F 246/00 (excluding breakdown indexing codes)	( <u>C09J 4/00</u> , <u>C08F</u> ); an adhesive composition based on at least one monomer; see <u>C09J 4/00</u>
#C9Jb	<u>C09J 4/06</u>	<u>C08F 251/00</u> - <u>C08F 291/185</u>	( <u>C09J 4/06</u> , <u>C08F</u> ); an adhesive composition based on at least one monomer and at least one polymer; see <u>C09J 4/06</u>
#C9Jc	<u>C09J 101/00</u> - <u>C09J 201/10</u>	C08L 1/00 - C08L 101/16 (excluding breakdown indexing codes)	( <u>C09J</u> , <u>C08L</u> ); an adhesive composition of two or more polymers; see <u>C09J 101/00</u>
#C9Jc(Si)	<u>C09J 101/00</u> - <u>C09J 201/10</u> (excluding <u>C09J 183/02</u> - <u>C09J 183/16</u> )	<u>C08L 83/02</u> - <u>C08L 83/16,</u> <u>C08L 83/00</u>	( <u>C09J</u> , <u>C08L 83/02</u> - <u>C08L 83/16</u> , <u>C08L 83/00</u> ,); an adhesive composition comprising one non- Si-based polymer in majority and two or more Si-based polymers; see <u>C09J 101/00</u>
#C9Jc(Si)2	<u>C09J 183/02</u> - <u>C09J 183/16</u>	C08L 83/00 and optionally C08L 1/00 – C08L 101/16 (excluding C08L 83/02 - C08L 83/16 and excluding breakdown indexing codes)	(C09J 183/02 - C09J 183/16, C08L 83/00, , C08L,); an adhesive composition comprising one Si-based polymer in majority and one or more Si-based polymers and optionally non-Si- based polymer(s); see C09J 183/00

#C9Je	<u>C09J 101/00</u> - <u>C09J 201/10</u>	<u>C08K 3/00</u> – <u>C08K 13/08</u> (excluding breakdown indexing codes)	( <u>C09J</u> , <u>C08K</u> ,); an adhesive composition of two or more polymers with additive(s); see <u>C09J 101/00</u>
#C9Jf	<u>C09J 101/00</u> - <u>C09J 201/10</u>	C08L 1/00 - C08L 101/16 (excluding breakdown indexing codes), C08K 3/00 - C08K 13/08 (excluding breakdown indexing codes)	( <u>C09J</u> , <u>C08L</u> , <u>C08K</u> ,); an adhesive composition of two or more polymers with additive(s); see <u>C09J 101/00</u>
#C9Jf(Si)	C09J 101/00 C09J 201/10 C09J 183/02 C09J 183/16)	C08L 83/02 - C08L 83/16, C08L 83/00, C08K 3/00 - C08K 13/08 (excluding breakdown indexing codes)	( <u>C09J</u> , <u>C08L 83/02</u> – <u>C08L 83/16</u> , <u>C08L 83/00</u> ,, <u>C08K</u> ,); an adhesive composition comprising one non-Si- based polymer in majority and two or more Si-based polymers and additive(s); see <u>C09J 101/00</u>
#C9Jf(Si)2	<u>C09J 183/02</u> - <u>C09J 183/16</u>	<u>C08L 83/00</u> and optionally <u>C08L 1/00</u> – <u>C08L 101/16</u> (excluding <u>C08L 83/02</u> - <u>C08L 83/16</u> ) and excluding breakdown indexing codes), <u>C08K 3/00</u> – <u>C08K 13/08</u> (excluding breakdown indexing codes)	(C09J 183/02 - C09J 183/16, C08L 83/00,, C08L, C08K,); an adhesive composition comprising one Si-based polymer in majority with one or more Si-based polymers and optionally non-Si polymer(s) and additive(s); see C09J 183/00
#C9J(z)	<u>C09J 101/00</u> - <u>C09J 201/10</u>	<u>C08L 2666/00</u> - <u>C08L 2666/26</u>	( <u>C09J</u> , <u>C08L 2666/00</u> - <u>C08L 2666/26</u> ); an adhesive composition of two or more polymers; see <u>C09J 101/00</u>
#C9Jg	<u>C09J 2400/00</u> – <u>C09J 2499/008</u> (exclusions apply, see C-Set rules)	<u>C09J 2400/00</u> – <u>C09J 2499/008</u> (exclusions apply, see C-Set rules)	(C09J 2400/00 – C09J 2499/008, C09J 2499/008, blends of material or resins used within the same layer of adhesives in the form of films or foils or in adhesive processes in general; see C09J 2400/00

#C9Jh	<u>C09J 2400/00</u> – <u>C09J 2499/008</u> (exclusions apply, see C-Set rules)	<u>C09J 2400/00</u> – <u>C09J 2499/008</u> (exclusions apply, see C-Set rules)	$(\underline{C09J 2400/00} - \underline{C09J 2499/008}, \underline{C09J 2499/008}, \underline{C09J 2400/00} - \underline{C09J 2499/008}, \dots), \underline{C09J 2301/414}$ $(co)polymers used$ within the same layer of adhesives in the form of films or foils or in adhesive processes in general; see $\underline{C09.1 2400/00}$
			<u>CU9J Z4UU/UU</u>

The specific C-Sets rule is located at only one place of the base symbol in the section Special rules of classification in the definition. If the C-Sets rule is applicable to all groups of a subclass, it is located at the subclass level only. If the same C-Sets rule is applicable to multiple groups or subgroups within the same subclass, the C-Sets rule is placed at the highest group or subgroup of the multiple groups.

In this subclass, all exemplified compositions should be classified as separate C-Sets. In the absence of examples, at least one C-Set is given on the basis of sufficient disclosure in the document.

# **Glossary of terms**

In this place, the following terms or expressions are used with the meaning indicated:

aliphatic radical	an acyclic or a non-aromatic carbocyclic carbon skeleton which is considered to be terminated by every bond: to an element other than carbon; a carbon atom having a double bond to one atom other than carbon; or an aromatic carbocyclic ring or a heterocyclic ring
use of materials as adhesives	the use of known or new polymers or products as adhesives
rubber	includes natural or conjugated diene rubbers or rubber in general (for a specific rubber, other than a natural rubber or a conjugated diene rubber, see the group provided for adhesives based on such macromolecular compounds)

# C09J 1/00

# Adhesives based on inorganic constituents

# **Definition statement**

This place covers:

Adhesives based on inorganic constituents unless they are based on compositions of mortars, concrete, artificial stone or hydraulic cement.

# References

# Limiting references

This place does not cover:

Hydraulic cement	<u>C04B 7/00</u>
Compositions of mortars, concrete or artificial stone	<u>C04B 28/00</u>

# C09J 4/00

Adhesives based on organic non-macromolecular compounds having at least one polymerisable carbon-to-carbon unsaturated bond {; adhesives, based on monomers of macromolecular compounds of groups <u>C09J 183/00</u> - <u>C09J 183/16</u>}

# **Definition statement**

This place covers:

Coating compositions for adhesives based on non-macromolecular compounds that are able to be polymerized during the film formation step (in-situ polymerization) in the absence of a pre-formed polymer.

Any composition for adhesives comprising at least one polymerisable ethylenically unsaturated monomer or oligomer and able to be polymerized by means of the known methods leading, during the film formation, to macromolecular compounds of C08F 210/00 - C08F 246/00 or coating compositions based on non-macromolecular compounds that are able to react, during the film formation, to form macromolecular compounds of groups C08G 77/00 - C08G 77/62.

# References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Adhesives based on blends from polymers	<u>C09J 101/00</u> -
	<u>C09J 201/10</u>

# **Special rules of classification**

Classification guidance:

- In the case of adhesive compositions based on non-macromolecular compounds that are able to react, during the film formation, to form macromolecular compounds of groups C08G 77/00 C08G 77/80 (e.g. by hydrolysis condensation of siloxane-type of monomers), C09J 4/00 is given together with a single symbol taken from groups C08G 77/00 C08G 77/62 to indicate the nature of the polymer formed and a single symbol taken from groups C09J 183/02 C09J 183/16 to indicate the nature of the adhesive composition which is assumed to be formed by the in situ polymerization of these monomers.
- An adhesive composition comprising phenyltriethoxysilane and aminopropyl trimethoxy silane in minority is classified in <u>C09J 4/00</u> together with <u>C08G 77/26</u> and in <u>C09J 183/08</u>.

#### Combination sets (C-Sets):

#### C-Sets statement: #C9Ja

- In group <u>C09J 4/00</u>, the adhesive compositions based on organic non-macromolecular compounds having at least one polymerizable carbon-to-carbon unsaturated bond are classified in the form of C-Sets.
- In #C9Ja, the base symbol, representing adhesive composition, is taken from the group <u>C09J 4/00</u>, whereas the subsequent symbol representing a representative monomer or a monomer in majority is taken from the groups <u>C08F 210/00</u> <u>C08F 246/00</u>.
- In addition, a separate C-Set representing the copolymer that is formed according to the monomers of <u>C08F</u> must be given.

#### C-Sets syntax rules:

- Each C-Set shall contain exactly two symbols.
- Duplicate symbols are not allowed in these C-Sets.

- Breakdown indexing codes are not allowed as either base or subsequent symbols.
- The order of symbols in these C-Sets is relevant as it reflects the adhesive composition and the monomer.

# **C-Sets examples:**

- #C9Ja: An adhesive composition consisting of 2-ethylhexylacrylate is classified as (<u>C09J 4/00</u>, <u>C08F 220/18</u>)
- #C9Ja: An adhesive composition comprising butylacrylate in majority and ethylene glycol dimethacrylate in minority is classified as (<u>C09J 4/00</u>, <u>C08F 220/18</u>) and as (<u>C08F 220/1804</u>, <u>C08F 222/102</u>) for the resulting copolymer.

# For searches using C-Sets:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 4/06

{Organic non-macromolecular compounds having at least one polymerisable carbon-to-carbon unsaturated bond} in combination with a macromolecular compound other than an unsaturated polymer of groups <u>C09J 159/00</u> - <u>C09J 187/00</u>

# **Definition statement**

# This place covers:

Coating compositions for adhesives based on non-macromolecular compounds that are able to be polymerized during the film formation step (in-situ polymerization) in the presence of a pre-formed polymer.

This includes any composition comprising at least one polymerisable ethylenically unsaturated monomer or oligomer that has at least another polymer and is able to be polymerized by means of the known methods leading to macromolecular compounds of C08F 251/00 - C08F 291/185.

# **Special rules of classification**

# C-Sets classification:

# C-Sets statement: #C9Jb

- In group <u>C09J 4/06</u>, the adhesive compositions based on organic non-macromolecular compounds having at least one polymerizable carbon-to-carbon unsaturated bonds in combination with a macromolecular compound are classified in the form of C-Sets.
- In #C9Jb, the base symbol, representing adhesive composition, is taken from the group <u>C09J 4/06</u>, whereas the subsequent symbol representing the resulting graft copolymer in accordance with <u>C08F</u> is taken from the groups <u>C08F 251/00</u> <u>C08F 291/185</u>.
- A separate C-Set representing the graft copolymer that is formed according to the monomers of <u>C08F</u> must also be given.

# C-Sets syntax rules:

- Each C-Set shall contain exactly two symbols.
- Duplicate symbols are not allowed in these C-Sets.
- Breakdown indexing codes are not allowed as either base or subsequent symbols.
- The order of symbols in these C-Sets is relevant as it reflects the adhesive composition and the grafted copolymer.

#### C-Sets examples:

• #C9Jb: An adhesive composition comprising methyl methacrylate and polybutylacrylate is classified as the C-Set (<u>C09J 4/06</u>, <u>C08F 265/06</u>) and (<u>C08F 265/06</u>, <u>C08F 220/14</u>) for the resulting grafted copolymer.

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 5/00

# Adhesive processes in general; Adhesive processes not provided for elsewhere, e.g. relating to primers

# **Definition statement**

#### This place covers:

Adhesive processes characterised by process features, e.g. heating; Pre-treatment of the surface to be joined, e.g. by use of a primer; Separate application of adhesive ingredients to the different surfaces to be joined.

Processes of joining materials by welding overlapping edges with an insertion of plastic material.

Processes of debonding substrates which were glued together beforehand.

# **Relationships with other classification places**

- Glue sticks are classified in C09J 9/005.
- Relationship between <u>C09J 5/00</u> and <u>C08J 5/12</u>: Subgroups of <u>C08J 5/12</u> are generally substrateoriented subgroups, whereas subgroups of <u>C09J 5/00</u> are generally process related subgroups.
- Processes in which the steps predominately modify the chemical nature of specifically defined substrates joined by an adhesive are generally classified in subgroups of <u>C09J 5/02</u>.
- Processes and articles in which macromolecular material substrates are heat bonded without the application of a separate adhesive are classified in <u>C08J 5/121</u>.
- Processes characterised by the chemical or physical nature of the adhesive, rather than the substrate(s), are generally classified in <u>C09J 5/00</u> and its subgroups.

# References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Processes for applying adhesives to surfaces	<u>B05D 5/10</u>
Removing scrap from containers, e.g. removing labels	<u>B08B 9/083</u>
Welding with interposition of material for facilitating bonding	<u>B23K 26/211</u>
Applying adhesives or glue to surfaces of wood to be joined	<u>B27G 11/00, B27G 11/02</u>
Methods or apparatus for laminating multiple layers	<u>B32B 37/00</u>
Hand-held desk devices for applying adhesives by contact to surfaces	<u>B43M 11/06</u>
Labelling machines and processes	<u>B65C</u>
Bonding of preformed macromolecular material to the same or other solid material	<u>C08J 5/12</u>

# **Special rules of classification**

Classification guidance:

Use of Indexing Codes:

C09J 2203/00 - C09J 2499/008 are indexing codes related to the use of materials in adhesive processes in general or adhesives in the form of films or foils used in conjunction with C09J 5/00 and C09J 7/00 groups.

<u>C09J 2203/00-C09J 2499/008</u> are used as single symbols and <u>C09J 2400/00</u> may also be used in C-Sets (in the case of blends or copolymers). C-Sets rules are explained in <u>C09J 2400/00</u>.

Use of indexing codes as single symbols:

- The nature of the polymer in the adhesive is indicated by the orthogonal indexing code <u>C09J 2400/22</u> or by an orthogonal indexing code taken only in the head groups of the range <u>C09J 2401/00</u> <u>C09J 2499/008</u>. For example, for a (meth) acrylic adhesive is classified with the orthogonal indexing code <u>C09J 2433/00</u>.
- The nature of the polymer in the barrier layer is indicated by the orthogonal indexing code <u>C09J 2400/221</u> or the orthogonal indexing code corresponding to the barrier layer taken in the range <u>C09J 2401/00</u> <u>C09J 2499/008</u>. For example, a barrier layer composition comprising a polyvinyl alcohol is classified with the orthogonal indexing code <u>C09J 2429/00</u>.
- The nature of the polymer in the primer coating is indicated by the orthogonal indexing code C09J 2400/223 or by the orthogonal indexing code corresponding to the primer coating taken in the range C09J 2400/00 C09J 2499/008. For example, for a primer coating comprising an epoxy resin is classified with the orthogonal indexing code C09J 2463/003.
- The nature of the polymer in the release coating is indicated by the orthogonal indexing code C09J 2400/225 or by the orthogonal indexing code corresponding to the release coating taken in the range C09J 2400/00 C09J 2499/008. For example, for a release coating comprising an epoxy resin is classified with the orthogonal indexing code C09J 2463/005.
- The nature of the substrate to be bonded is indicated by the appropriate orthogonal indexing code taken in the range <u>C09J 2400/00</u> <u>C09J 2499/008</u>. For example, a substrate made of a polyolefin is classified with the orthogonal indexing code <u>C09J 2423/006</u>.
- The nature of the pre-treated substrate to be bonded, irrelevant to what the pre-treatment might be, e.g. plasma or corona, is indicated by the appropriate orthogonal indexing code taken in the range <u>C09J 2400/00</u> – <u>C09J 2499/008</u>. For example, a pre-treated polyolefin substrate is classified with the orthogonal indexing code <u>C09J 2423/008</u>.
- A process of debonding, is indicated by the orthogonal indexing code C09J 2301/502.
- Applications, chemical or physical properties or process features are indicated by the corresponding orthogonal indexing codes in the range <u>C09J 2203/00</u> – <u>C09J 2203/37</u> and <u>C09J 2301/00</u> – <u>C09J 2301/416</u>.

# C09J 5/02

# involving pretreatment of the surfaces to be joined

# **Definition statement**

This place covers:

Preparing the surfaces to promote bonding such as using a solvent.

# **Special rules of classification**

The nature of the pre-treated substrate to be bonded, irrelevant to what the pre-treatment might be, e.g. plasma or corona, is indicated by an Indexing Code in the group C09J 2400/00 - C09J 2499/008. For example, a pre-treated polyolefin substrate is classified with the Indexing Code C09J 2423/008.

# C09J 7/00

# Adhesives in the form of films or foils

# **Definition statement**

This place covers:

Adhesive tapes, films or sheets characterised by having an outer adhesive layer to be applied to a substrate. The outer adhesive layer might be covered by a release liner or a release sheet (see illustrative example).

Adhesives in the form of films or foils without carriers.

Adhesives in the form of films or foils on carriers, e.g. plastics, paper, textile fabrics, laminated material.

Carriers with adhesive in the form of films or foils.

Release liners of adhesives in the form of films or foils.

Release coatings on the carrier.

Primer between the carrier and the adhesive.

Illustrative example of subject matter classified in this place:



The illustrative example shows a carrier mounted adhesive film with a barrier layer, a primer coating, a release coating on the carrier layer and a release liner.

# **Relationships with other classification places**

Relationship between C09J 7/00 and H01L 21/00:

Subgroups of <u>C09J 7/00</u> are generally chemistry-oriented subgroups, whereas subgroups of <u>H01L 21/00</u> are generally process related subgroups.

Relationship between  $\underline{C09J 7/00}$  and other groups of the subclass: Adhesives in the form of film or foils with or without a carrier layer and being specified by the macromolecular constituent are classified in  $\underline{C09J 101/00}$  -  $\underline{C09J 201/00}$ .

For example, if a document discloses an adhesive tape having a carrier and being characterised by an acrylic adhesive layer (covered by  $\underline{C09J 7/385}$ ), this document should also be classified in one of the subgroups of  $\underline{C09J 133/00}$ .

Relationship between <u>C09J 7/00</u> areas and <u>B32B</u> areas:

Layered structures in which the adhesive layer is between other layers that are not removable are classified in appropriate <u>B32B</u> areas. When the adhesive layer represents the outermost layer, which may be covered by only a removable release layer, it is classified as an adhesive tape in the appropriate subgroups of <u>C09J 7/00</u>.

See Table 1 below as an example.

Table 1: Difference between a layered structure (B32B) and an adhesive tape (C09J 7/00)

between other layers that are not removable.	
	layer 1
	adhesive
	layer 2
Adhesive tape <u>C09J 7/00</u> : adhesive layer	
represents the outermost layer (may be covered	
by only a removable release liner).	adhesive
by only a removable release liner).	adhesive layer 1
by only a removable release liner).	adhesive layer 1 layer 2

# References

# **Application-oriented references**

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Hook and loop tape or fasteners	<u>A44B 18/00</u>
Bandages or dressings	<u>A61F 13/00</u>
Adhesive bandages or dressings	<u>A61F 13/02</u>
Auxiliary appliances for wound dressings	<u>A61F 15/00</u>
Adhesive bandages, dressing or adsorbent pad, e.g. plasters	<u>A61L 15/00</u>
Surgical adhesives or cements; Adhesives for colostomy devices	<u>A61L 24/00</u>
Laminates comprising at least two layers which are bonded permanently by means of an adhesive layer	<u>B32B 7/12</u>
Non-metallic flexible elongated elements for bundling or supporting articles, e.g., adhesive tapes	<u>B65D 63/1009</u>
Labels fastened or secured by an adhesive layer	<u>G09F 3/10</u>
Wafer tapes	H01L 21/6836
Adhesive tapes used in dicing/grinding of semiconductors and wafers	H01L 21/78, H01L 21/304
Adhesive tapes used for connecting semiconductor devices	H01L 24/83
Back sheet for solar cell panels	H01L 31/0488
Sealing materials for batteries	H01M 50/183

# Informative references

Attention is drawn to the following places, which may be of interest for search:

Adhesives in the form of films or foils without a carrier and being specified by the macromolecular constituent	<u>C09J 101/00</u>
Masking elements for spraying apparatus	<u>B05B 12/20</u>
Attaching together paper or cardboard sheets, strips or webs by adhesive tape	<u>B31F 5/06</u>
Machines or apparatus for gluing labels or articles to be labelled	<u>B65C 9/20</u>
Attaching a replacement web to an expiring web in a machine, e.g. flying splice	<u>B65H 19/1805</u>
Microstructured surfaces having tips, pillars, i.e. raised structures	<u>B81C 1/00111</u>
Coated paper	<u>D21H 19/00</u>
Release paper	<u>D21H 27/001</u>
Signs, plates, panels or boards with readily detachable symbols attached with adhesive	<u>G09F 7/12</u>

# **Special rules of classification**

Use of Indexing Codes:

<u>C09J 2203/00</u> and <u>C09J 2400/00</u> are indexing schemes that are related to the use of materials in adhesive processes in general or adhesives in the form of films or foils and are used as single

symbols or in C-Sets (in the case of blends or copolymers) in conjunction with groups  $\frac{C09J 5/00}{C09J 7/00}$ .

C-Sets rules are explained in C09J 2400/00.

Use of indexing codes as single symbols:

- The nature of the polymer in the adhesive is indicated by the orthogonal indexing code <u>C09J 2400/22</u> or by an orthogonal indexing code taken only in the head groups of the range <u>C09J 2401/00</u> C 09J 2499/008. For example, a (meth) acrylic adhesive is classified with the orthogonal indexing code <u>C09J 2433/00</u>.
- The nature of the polymer in the barrier layer is indicated by the orthogonal indexing code <u>C09J 2400/221</u> or the orthogonal indexing code corresponding to the barrier layer taken in the range <u>C09J 2401/00</u> C 09J 2499/008. For example, a barrier layer composition comprising a polyvinyl alcohol is classified with the orthogonal indexing code <u>C09J 2429/00</u>.
- The nature of the polymer in the primer coating is indicated by the orthogonal indexing code C09J 2400/223 or by the orthogonal indexing code corresponding to the primer coating taken in the range C09J 2400/00 C09J 2499/008. For example, a primer coating comprising an epoxy resin is classified with the orthogonal indexing code C09J 2463/003.
- The nature of the polymer in the release coating is indicated by the orthogonal indexing code <u>C09J 2400/225</u> or by the orthogonal indexing code corresponding to the release coating taken in the range <u>C09J 2400/00</u> –<u>C09J 2499/008</u>. For example, a release coating comprising an epoxy resin is classified with the orthogonal indexing code <u>C09J 2463/005</u>.
- The nature of the substrate to be bonded is indicated by the appropriate orthogonal indexing code taken in the range <u>C09J 2400/00</u> <u>C09J 2499/008</u>. For example, a substrate made of a polyolefin is classified with the orthogonal indexing code <u>C09J 2423/006</u>.
- The nature of the pre-treated substrate to be bonded, irrelevant to what the pre-treatment might be, e.g. plasma or corona, is indicated by the appropriate orthogonal indexing code taken in the range <u>C09J 2400/00</u> – <u>C09J 2499/008</u>. For example, a pre-treated polyolefin substrate is classified with the orthogonal indexing code <u>C09J 2423/008</u>.
- A process of debonding is indicated by the orthogonal indexing code C09J 2301/502.
- Applications, chemical or physical properties or process features are indicated by the corresponding orthogonal indexing codes in the range <u>C09J 2203/00</u> – <u>C09J 2203/37</u> and <u>C09J 2301/00</u> – <u>C09J 2301/416</u>.
- For example, the use of an adhesive tape for bundling cables should be indicated by the orthogonal indexing code <u>C09J 2203/302</u>. The presence of an adhesive layer being formed by alternating adhesive areas being chemically different is indicated by the orthogonal indexing code <u>C09J 2301/21</u>.

Illustrative example of subject matter classified in this place:



• In contrast, the presence of different adhesive layers opposing each other is indicated by the orthogonal indexing code <u>C09J 2301/1242</u>.

Illustrative example of subject matter classified in this place:



• In case the adhesive layer is interrupted by non-adhesive protrusions extending from the surface of the carrier layer, the orthogonal indexing code <u>C09J 2301/206</u> is given.

Illustrative example of subject matter classified in this place:



• In case the adhesive coating is discontinuous, the orthogonal indexing code <u>C09J 2301/204</u> is given.

Illustrative example of subject matter classified in this place:



- The presence of an additive in the adhesive or substrate layer is indicated by the corresponding orthogonal indexing codes in the range <u>C09J 2301/408</u> – <u>C09J 2301/41</u>.
- The nature of the non-macromolecular additive is subsequently indicated by a symbol from <u>C08K 3/00</u> – <u>C08K 13/08</u>, as additional information. For example, the adhesive layer of an adhesive tape comprising an inorganic flame proofing agent is classified in <u>C09J 2301/408</u>, which is the indexing code that indicates the presence of an additive in the adhesive layer, as well as in <u>C08K 3/016</u> (ADD), as the inorganic flame proofing agent is considered an essential feature of the adhesive layer.

#### Further details of subgroups

• <u>C09J 7/40</u>:

The subgroups of <u>C09J 7/40</u> cover release liners used to cover the adhesive surface of an adhesive tape as illustrated in the definition statement. Release coating layers being part of the adhesive tape (cf. the illustrative example in the definition statement) itself are classified in <u>C09J 7/203</u>, <u>C09J 7/22</u> and <u>C09J 7/203</u>, <u>C09J 7/21</u>.

• <u>C09J 7/201</u>:

This subgroup is given where the release coating composition is applied to the carrier layer (cf. illustrative example in the definition statement).

• <u>C09J 7/28</u>:

Classification in this subgroup concerns carrier constituted by a metal sheet only.

• <u>C09J 7/29</u>:

Classification in this subgroup concerns adhesive tapes having a carrier constituted by a laminate. The presence of a foam, metal, paper, textile or other material layer in the laminate is indicated by the corresponding orthogonal indexing code of C09J 2400/123 - C09J 2499/006. The presence of only resin layers in the laminate is indicated by the orthogonal indexing code C09J 2301/162.

In general, the nature of the resin in the laminate support layer is indicated by the corresponding orthogonal indexing codes of  $\underline{C09J \ 2401/00} - \underline{C09J \ 2499/006}$ . For example, for a laminate carrier comprising a layer made of a polyolefin, the Indexing Code  $\underline{C09J \ 2423/006}$  should be given.

Metallised films or foils are classified in  $\underline{C09J7/22}$  or  $\underline{C09J7/29}$  depending on the relationship between the metal layer and the adhesive. See Table 2 below.

Table 2: Difference between a metallised film or foil (<u>C09J 7/22</u>) and a laminate carrier layer having one metal layer (<u>C09J 7/29</u>)

Carrier layer is constituted by metallised plastic sheet <u>C09J 7/22</u> bearing a thin metal layer.	adhesive layer
	thin metal layer
	plastic layer



Adhesive tape with a laminate carrier that has a textile fabric or paper layer is NOT classified in the subgroups of  $\frac{C09J}{7/21}$ .

The presence of a barrier layer, a release coating layer, or a primer layer does not constitute a laminate carrier layer. These layers are considered forming part of the carrier layer (cf. the illustrative example in the definition statement). In contrast, a carrier layer being coated with an ink receptive layer is considered as a laminate support layer.

• <u>C09J 7/21</u>:

Subgroups of <u>C09J 7/21</u> are given to adhesive tapes having a carrier made of paper or textile fabrics. In order to indicate whether a paper or a textile fabrics carrier layer is present, the corresponding orthogonal indexing code of <u>C09J 2400/283</u> and <u>C09J 2400/263</u>, respectively, is given.

Laminate carrier layers comprising a layer made of paper of textile fabrics are NOT classified in the subgroups of C09J7/21, instead laminated carriers are classified in the subgroup of C09J7/29.

• <u>C09J 7/21</u>, <u>C09J 7/201</u>:

This subgroup is given where the release adhesive composition is applied to the paper or textile fabrics carrier layer. (cf. the illustrative example in the definition statement).

# **Glossary of terms**

In this place, the following terms or expressions are used with the meaning indicated:

adhesive film	a free-standing film or sheet of adhesive (adhesive without carrier) or coating of adhesive on a film or sheet rather than a larger substrate. For example, the adhesive as a film on a tape rather than a generic substrate disclosed as generally a non-tape or sheet entity.
metal foil	a free-standing thin metal substrate as the only adhesive carrying component on which the adhesive is applied.
pressure-sensitive adhesive	pressure-sensitive adhesive (PSA, self-adhesive, self-stick adhesive) is adhesive which forms a bond when pressure is applied to adhere the adhesive with the adherend. No solvent, water or heat is needed to activate the adhesive.

metallised plastic	metallised plastics are plastics coated with a thin layer of metal, usually aluminium. Metallisation is generally performed using physical vapour deposition, plating or thermal/cold spraying processes. This coating is much thinner than a metal foil could be made, in the range of 0.5 micrometres.
heat-activated adhesives	heat-activated adhesives are designed to bond parts or components through the use of heat (over 30°C).

# **Synonyms and Keywords**

In patent documents, the following abbreviations are often used:

AA	Acrylic acid
MAA	Methacrylic acid
PSA	Pressure-sensitive adhesive

In patent documents, the following words/expressions are often used as synonyms:

- "carrier", "support", "substrate", "facestock" or "backing"
- "adhesive", "glue", "fixative", "bonding agent" or "sealant"

# C09J 9/00

Adhesives characterised by their physical nature or the effects produced, e.g. glue sticks (C09J 7/00 takes precedence)

# **Definition statement**

#### This place covers:

Adhesives that are specified (when the macromolecular constituent is known) and where the emphasis is on the physical nature or the effect produced.

In this place, the physical nature or effect produced refers to non-mechanical, physical nature and/ or effects such as optical, electrical or thermal conductivity of the adhesive rather than mechanical properties such as tensile strength, moduli or peel strength.

# **Relationships with other classification places**

Adhesives characterised by their mechanical properties are classified according to the specific adhesive or the unspecified adhesive as discussed throughout the <u>C09J</u> definition statement. In other words, the adhesive would be classified as if the mechanical properties were not present.

Classification in <u>C09J 9/00</u> shall only be done when the adhesive is specified and when the effect due to the presence of an additive cannot appropriately be classified in <u>C08K</u>. The additive responsible for the physical nature or effect produced when the adhesive is specified is classified according to the adhesive and the appropriate <u>C08K</u> symbol for the additive.

#### Example:

Electrically conductive adhesive comprising a polyurethane adhesive and metallic particles is classified in <u>C09J 9/02</u> (when the focus of the invention is on the effect obtained), <u>C09J 175/04</u> (polyurethane) and <u>C08K 3/08</u> (ADD) (for the additive itself), since <u>C08K 3/08</u> classifies the metallic particle and not its effect.

Adhesives characterised by their physical nature or effect produced when the adhesive itself is unspecified and the additive is known are classified in C09J 11/00 according to the additive responsible for the physical nature or effect produced.

Example:

Adhesive comprising an unspecified polymer and metallic particles is classified in  $\underline{\text{C09J 11/04}}$  (for the presence of the additive) and in  $\underline{\text{C08K 3/08}}$  (ADD) (for the additive itself).

# References

# Limiting references

This place does not cover:

Adhesives in the form of films or foils	<u>C09J 7/00</u>
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# C09J 11/00

# Features of adhesives not provided for in group C09J 9/00, e.g. additives

# **Definition statement**

This place covers:

Additives in adhesive formulations where the adhesive itself is unspecified and the additive is known.

# **Relationships with other classification places**

Additives in adhesive formulations where the adhesive itself is specified are classified in the appropriate group in C09J 101/00 - C09J 201/10 and in C08K in the form of a C-Set. See C09J definitions.

# C09J 101/00

# Adhesives based on cellulose, modified cellulose, or cellulose derivatives

# **Definition statement**

This place covers:

Adhesives based on cellulose, modified cellulose or cellulose derivatives corresponding to the following groups:

C08B 1/00-C08B 1/14

C08B 5/00-C08B 5/14

C08B 7/00

<u>C08B 9/00-C08B 9/06</u>

C08B 11/00-C08B 11/22

C08B 13/00-C08B 13/02

C08B 15/00-C08B 15/10

C08B 16/00

C08B 17/00-C08B 17/06

# **Relationships with other classification places**

Covalently or ionically crosslinked gels are classified in <u>C08B</u>.

A composition based on cellulose, modified cellulose or cellulose derivatives is classified in <u>C08L</u>.

Coating compositions based on cellulose, modified cellulose or cellulose derivatives are classified in <u>C09D</u>.

# References

# Informative references

Attention is drawn to the following places, which may be of interest for search:

Cellulose or derivatives thereof per se	<u>C08B 1/00</u> - <u>C08B 17/06</u>
Composition comprising cellulose or cellulose derivative	<u>C08L 1/00</u> - <u>C08L 1/32</u>
Composition based on lignin-containing materials, e.g. lignin, cork, lignocellulose or wood	<u>C08L 97/00</u>
Composition of natural macromolecular compounds or of derivatives thereof not provided for in <u>C08L 89/00</u> - <u>C08L 97/00</u> , e.g. flours	<u>C08L 99/00</u>
Coating composition comprising cellulose or cellulose derivative	<u>C09D 101/00</u> - <u>C09D 101/32</u>

# **Special rules of classification**

Last place priority rule:

Within each group of this subclass, in the absence of an indication to the contrary, classification is made in the last appropriate place.

Classification guidance:

- The subject matter disclosed in both the claims and the examples of a patent document is to be classified.
- Adhesive compositions of cellulose or derivatives thereof in solution, together with other macromolecular compounds, or together with an inorganic or non-macromolecular organic additive are considered as an adhesive composition and are thus classified according to the rules of <u>C09J</u>.

#### **C-sets classification:**

#### C-Sets statement: #C9Jc, #C9Je, and #C9Jf

- In groups <u>C09J 101/00</u> <u>C09J 201/10</u> adhesive composition based on polymers, and when present non-macromolecular additive(s), are classified in the form of C-Sets according to the relative proportions by weight percentage of the macromolecular constituents.
- In #C9Jc, the base symbol, representing the polymer in majority, is taken from the groups <u>C09J 101/00</u> - <u>C09J 201/10</u>, whereas the subsequent symbol(s) representing the polymer(s) in minority is (are) taken from the groups <u>C08L 1/00</u> - <u>C08L 101/16</u>.
- In #C9Je, the base symbol, representing the polymer, is taken from the groups <u>C09J 101/00</u> - <u>C09J 201/10</u>, whereas the subsequent symbol(s) representing compound(s) used as an additive(s), is (are) taken from the groups <u>C08K 3/00</u> - <u>C08K 13/08</u>.
- In #C9Jf, the base symbol, representing the polymer in majority, is taken from the groups <u>C09J 101/00</u> - <u>C09J 201/10</u>, whereas the subsequent symbol(s) representing the polymer(s) in minority is (are) taken from the groups <u>C08L 1/00</u> - <u>C08L 101/16</u> and further subsequent symbols representing compound(s) used as an additive(s), is (are) taken from the groups <u>C08K 3/00</u> - <u>C08K 13/08</u>.
- In addition, a single symbol is given according to the macromolecular constituent present in the highest proportion.
- If all the constituents are present in equal proportions, the composition is classified according to each of these constituents.
- In the case that several polymers are in the majority, separate C-Sets should be made based on each polymer in the majority and its component(s) in the minority.

# C09J 101/00 (continued)

Special rules of classification

- Attention is drawn to adhesive compositions comprising, next to a major macromolecular compound according to <u>C09J 101/00</u> - <u>C09J 201/00</u> (excluding <u>C09J 183/02</u> - <u>C09J 183/16</u>), two or more Si-based macromolecular compounds in accordance with <u>C08G 77/00</u> which are classified according to #C9Jc(Si) or C9Jf(Si) as explained below.
- Orthogonal indexing codes <u>C09J 2203/00</u> <u>C09J 2499/008</u> must also be allocated as separate symbols when applicable.

# C-Sets syntax rules:

- C-Set of #C9Jc and #C9Je shall contain at least two symbols.
- C-Set of #C9Jf shall contain at least three symbols.
- Duplicate subsequent symbols are allowed in these C-Sets for the subsequent symbols only.
- Breakdown indexing codes are not allowed as either base or subsequent symbols.
- The order of <u>C09J</u> symbols in these C-Sets is relevant as it reflects the relative amounts of each polymer, <u>C09J</u> always appears as base symbol.
- For #C9Jf the symbols for the additives always appear after the symbols for the polymers regardless their relative amounts.

# **C-Sets examples:**

- #C9Jc: An adhesive composition comprising poly-2-ethylhexyl acrylate (<u>C09J 133/08</u>) and polyvinyl chloride (<u>C08L 27/06</u>) is classified as (<u>C09J 133/08</u>, <u>C08L 27/06</u>).
- #C9Jc: An adhesive composition consisting of 60 wt.% of microcrystalline cellulose (<u>C09J 101/04</u>) and 40 wt.% of maltodextrin (<u>C08L 3/02</u>) is classified as (<u>C09J 101/04</u>, <u>C08L 3/02</u>).
- #C9Je: An adhesive composition comprising poly-2-ethylhexyl acrylate in majority and a triaryl phosphate fire retardant (<u>C08K 5/523</u>) is classified as (<u>C09J 133/08</u>, <u>C08K 5/523</u>).
- #C9Je: An adhesive composition consisting of carboxymethyl cellulose and glycerol (plasticiser) is classified as (<u>C09J 101/286</u>, <u>C08K 5/053</u>) and in <u>C08K 5/0016</u>.
- #C9Jf: An adhesive composition comprising poly-2-ethylhexyl acrylate in majority, polyvinyl chloride and a triaryl phosphate fire retardant (<u>C08K 5/523</u>) is classified as: <u>C09J 133/08</u>, <u>C08L 27/06</u>, <u>C08K 5/523</u>.

# C-Sets statement: #C9Jc(Si), #C9Jf(Si)

- #C9Jc(Si) and #C9Jf(Si) are a special use of #C9Jc and #C9Jf and are applied for an adhesive composition comprising two or more Si-based polymers in accordance with <u>C08G 77/00</u>.
- In #C9Jc(Si), the base symbol, representing the polymer in majority, is taken from the groups <u>C09J 101/00</u> - <u>C09J 201/10</u> (excluding <u>C09J 183/02</u> - <u>C09J 183/16</u>), whereas the subsequent symbols representing the polymers in minority are taken from the groups <u>C08L 83/02</u> - <u>C08L 83/16</u> (or the Si-based polymer in majority, and in <u>C08L 83/00</u> for the Si-based polymer in minority.
- In #C9Jf(Si), the base symbol, representing the polymer in majority, is taken from the groups <u>C09J 101/00</u> - <u>C09J 201/10</u> (excluding <u>C09J 183/02</u> - <u>C09J 183/16</u>), whereas the subsequent symbols representing the polymers in minority are taken from the groups <u>C08L 83/02</u> - <u>C08L 83/16</u> (for the Si-based polymer in majority), and in <u>C08L 83/00</u> (for the Si-based polymer in minority) and further subsequent symbols representing compound(s) used as an additive(s), is (are) taken from the groups <u>C08K 3/00</u> - <u>C08K 13/08</u>.
- The classification is further described by adding, as one or more additional codes, one or more symbols selected from the range C08G 77/02 C08G 77/62 corresponding to each of the silicon-based macromolecular compound components detailed in the C-Set.
- In all cases, a single symbol is also given according to the macromolecular constituent present in the highest proportion.

# C-Sets syntax rules:

- C-Set of #C9Jc(Si) shall contain at least three symbols.
- C-Set of #C9Jf(Si) shall contain at least four or more symbols.
- Duplicate subsequent symbols are allowed in these C-Sets for subsequent symbols, only one symbol selected from the range <u>C08L 83/02</u> - <u>C08L 83/16</u> is permitted per C-Set.

- Special rules of classification
  - Breakdown indexing codes are not allowed as either base or subsequent symbols.
  - The order of symbols in these C-Sets is relevant as it reflects the relative amounts of each polymer; <u>C09J</u> always appears as the base symbol.
  - The order of <u>C08K</u> symbols of additives is not relevant if there is more than one additive in the composition
  - For #C9Jf(Si), the symbols for the additive(s) always appear(s) after the symbols for the polymers of regardless their relative amounts.

### **C-Sets examples:**

- #C9Jc(Si): An adhesive composition comprising, in descending amounts by weight, a polyester in accordance with <u>C08G 63/02</u> (<u>C09J 167/02</u>), an amine-substituted polysiloxane in accordance with <u>C08G 77/26</u> and an epoxy-substituted polysiloxane in accordance with <u>C08G 77/14</u> is classified as (<u>C09J 167/02</u>, <u>C08L 83/08</u>, <u>C08L 83/00</u>) and in <u>C08G 77/14</u> (ADD) and <u>C08G 77/26</u> (ADD).
- #C9Jf(Si): An adhesive composition comprising, in descending amounts by weight, a polyester in accordance with <u>C08G 63/02</u> (<u>C09J 167/02</u>), an amine-substituted polysiloxane in accordance with <u>C08G 77/26</u> and an epoxy-substituted polysiloxane in accordance with <u>C08G 77/14</u> and carbon black is classified as (<u>C09J 167/02</u>, <u>C08L 83/08</u>, <u>C08L 83/00</u>, <u>C08K 3/04</u>) and <u>C08G 77/14</u> (ADD) and <u>C08G 77/26</u> (ADD).

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses, e.g. <u>C08L</u> and <u>C09D</u>.

In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

#### Search rules #C9Jz:

• To search an adhesive composition of 2 polymers, build search queries as follows:

(<u>C09J</u> of the polymer in majority, <u>C08L 2666/00</u> - <u>C08L 2666/26</u>).

The subsequent symbol is selected from the most appropriate subgroup of C08L 2666/02 - C08L 2666/26 (last place rule).

The search statement can also be further refined by searching the polymer in minority by using its <u>C08L</u> as ADD for documents classified between 2003 and April 2012.

Example 1: An adhesive composition based on a 60 parts of a polyamide (<u>C09J 177/00</u>) and 40 parts of a graft polymer

Search queries: (C09J 177/00, C08L 2666/24).

Example 2: An adhesive composition based on a polysiloxane (<u>C09J 183/04</u>) and containing a second polysiloxane, a phenol and silica

Search queries: (C09J 183/04, C08L 83/00, C08K 5/13, C08K 3/36) and optionally C08L 2205/02.

#C9Jz search rules do not apply when polysiloxane is in majority and when there is a second polysiloxane; <u>C08L 83/00</u> is used as subsequent symbol(s) in that case.

• To search for a composition of 3 or more polymers, build search queries as follows:

(C09J of the polymer in majority, C08L 2666/00 - C08L 2666/26) and C08L 2205/03 (ADD)

The search statement can also be further refined by searching the polymers in minority by using their <u>C08L</u> as ADD for documents classified between 2003 and April 2012.

In the case of a composition of three or more polymers, the subsequent symbol is taken from the common C08L 2666/00 - C08L 2666/26 group that covers all minority polymers.

# C09J 103/00

# Adhesives based on starch, amylose or amylopectin or on their derivatives or degradation products

#### **Definition statement**

This place covers:

Adhesives compositions of starch, amylose or amylopectin or of their derivatives or degradation products corresponding to the following groups:

C08B 30/00-C08B 30/18

C08B 31/00-C08B 31/185

C08B 33/00-C08B 33/08

C08B 35/00-C08B 35/08

# **Relationships with other classification places**

A composition based on starch or derivatives thereof is classified in CO8L.

Covalently or ionically crosslinked gels are classified in CO8B.

Coating compositions based on such starches are classified in <u>C09D</u>.

#### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Starch and derivatives thereof per se	<u>C08B 30/00</u> - <u>C08B 35/08</u>
Composition comprising cellulose or cellulose derivative starch, amylose, amylopectin or their derivatives or degradation products	<u>C08L 3/00</u> - <u>C08L 3/20</u>
Composition of natural macromolecular compounds or of derivatives thereof not provided for in groups C08L 89/00 - C08L 97/00, e.g. flours	<u>C08L 99/00</u>
Coating composition comprising starch, amylose, amylopectin or their derivatives or degradation products	<u>C09D 103/00</u> - <u>C09D 103/20</u>

# **Special rules of classification**

Last place priority rule:

Within each group of this subclass, in the absence of an indication to the contrary, classification is made in the last appropriate place.

Classification guidance:

- The subject-matter disclosed in both the claims and the examples of a patent document is to be classified.
- Adhesive composition of starch or derivatives thereof in solution, together with other macromolecular compounds, or together with an inorganic or non-macromolecular organic additive are considered as an adhesive composition and are thus classified according to the rules of <u>C09J</u>.

# C-Sets classification:

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

- The adhesive compositions of this group are classified in the form of C-Sets according to the relative proportions by weight percentage of the macromolecular constituents.
- In addition, a single symbol is given according to the macromolecular constituent present in the highest proportion.
- If all the constituents are present in equal proportions, the composition is classified according to each of these constituents.
- The adhesive compositions containing a starch and an inorganic or non-macromolecular organic additive as compounding agent are not classified in <u>C08K</u>, but in the <u>C09J</u> subclass together with the corresponding symbol in <u>C08K</u> in the form of C-Sets.

Example 1: Adhesive composition of starch acetate in solution is classified in C09J 103/06.

Example 2: An adhesive composition consisting of 60 wt. % of crosslinked starch and 40 wt.% of maltodextrin is classified in (<u>C09J 103/04</u>, <u>C08L 3/02</u>) and <u>C08L 2205/02</u>.

Example 3: An adhesive composition consisting of carboxymethyl starch and glycerol (plasticiser) is classified in (<u>C09J 103/08</u>, <u>C08K 5/053</u>) and <u>C08K 5/0016</u>.

#### C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 105/00

Adhesives based on polysaccharides or on their derivatives, not provided for in groups <u>C09J 101/00</u> or <u>C09J 103/00</u>

# **Definition statement**

This place covers:

Adhesives based on polysaccharides, other than cellulose and starch, or on derivatives thereof corresponding to the following groups:

C08B 37/00-C08B 37/0096

# **Relationships with other classification places**

Covalently or ionically crosslinked gels are classified in CO8B.

A composition based on such polysaccharides or derivatives thereof is classified in CO8L.

Coating compositions based on such polysaccharides are classified in <u>C09D</u>.

# References

# Informative references

Attention is drawn to the following places, which may be of interest for search:

Polysaccharides per se	<u>C08B 37/00</u> - <u>C08B 37/0096</u>
Polysaccharides per se	<u>C08B 37/00</u> - <u>C08B 37/0096</u>

Composition comprising polysaccharide or polysaccharide derivative	<u>C08L 5/00</u> - <u>C08L 5/16</u>
Coating composition comprising polysaccharide or polysaccharide derivative	<u>C09D 105/00</u> - <u>C09D 105/16</u>

# **Special rules of classification**

Last place priority rule:

Within each group of this subclass, in the absence of an indication to the contrary, classification is made in the last appropriate place.

Classification guidance:

- The subject-matter, disclosed in both the claims and the examples of a patent document, is to be classified.
- Adhesive compositions of polysaccharides or derivatives thereof in solution, or together with other macromolecular compounds, or together with an inorganic or non-macromolecular organic additive are considered as a composition and are thus classified according to the rules of <u>C09J</u>.

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

- The adhesive compositions of this group are classified in the form of C-Sets (i.e. #C9J(c)) according to the relative proportions by weight percentage of the macromolecular constituents.
- In addition, a single symbol is given according to the macromolecular constituent present in the highest proportion.
- If all the constituents are present in equal proportions, the composition is classified according to each of these constituents.
- Adhesive compositions containing a single polymer and an inorganic or non-macromolecular organic additive as compounding agent are not classified in <u>C08K</u>, but in the <u>C09J</u> subclass together with the corresponding symbol in <u>C08K</u> in the form of C-Sets.

Example 1: Adhesive composition of ethers of cyclodextrin in solution is classified in C09J 105/16.

Example 2: An adhesive composition consisting of 60 wt.% of hyaluronic acid and 40 wt.% of maltodextrin is classified as (<u>C09J 105/08</u>, <u>C08L 3/02</u>).

Example 3: An adhesive composition consisting of carboxymethyl dextran and glycerol (plasticiser) is classified as (<u>C09J 105/02</u>, <u>C08K 5/053</u>) and (<u>C09D 105/02</u>, <u>C08K 5/0016</u>).

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 107/00

# Adhesives based on natural rubber

# **Definition statement**

This place covers:

Adhesive compositions of natural rubbers or latex.

# **Special rules of classification**

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 109/00

# Adhesives based on homopolymers or copolymers of conjugated diene hydrocarbons

# **Definition statement**

This place covers:

- · Adhesive compositions of copolymers with acrylonitrile or latex
- Adhesive compositions of copolymers with styrene or latex

# **Special rules of classification**

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 111/00

# Adhesives based on homopolymers or copolymers of chloroprene

#### **Definition statement**

This place covers:

Adhesive compositions of homopolymers or copolymers of chloroprene or latex.

# **Special rules of classification**

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 113/00

# Adhesives based on rubbers containing carboxyl groups

# **Definition statement**

#### This place covers:

Adhesive compositions of rubbers containing carboxyl groups containing monomers in minority, e.g. acrylic acid or acrylic acid esters.

# **Special rules of classification**

#### C-Sets classification:

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 115/00

# Adhesives based on rubber derivatives (<u>C09J 111/00</u>, <u>C09J 113/00</u> take precedence)

# **Definition statement**

This place covers:

Adhesive compositions based on rubber derivates, meaning a rubber treated according to <u>C08C</u>.

# **Relationships with other classification places**

See <u>C09J 107/00</u>.

# References

#### **Limiting references**

This place does not cover:

Adhesives based on copolymers of chloroprene	<u>C09J 111/00</u>
Adhesives based on rubbers containing carboxyl groups	<u>C09J 113/00</u>

# **Special rules of classification**

An additional symbol from <u>C08C</u> may be given for the treatment.

# C-Sets classification:

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

# C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 117/00

### Adhesives based on reclaimed rubber

# **Definition statement**

This place covers:

Adhesive compositions based on reclaimed rubber meaning the reuse of unvulcanised or devulcanised rubber.

# **Special rules of classification**

#### C-Sets classification:

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 119/00

# Adhesives based on rubbers, not provided for in groups C09J 107/00 - C09J 117/00

# **Definition statement**

This place covers:

- Adhesives based on natural or synthetic elastic material not classifiable in groups <u>C09J 107/00</u> - <u>C09J 117/00</u>
- Adhesive compositions comprising vulcanised or crosslinked rubber which are classified in <u>C09J 119/003</u>
- Adhesive compositions containing rubbers with functional groups, e.g. telechelic diene rubbers which are classified in <u>C09J 119/006</u>.

# **Relationships with other classification places**

- Compositions comprising diene rubbers or their derivatives are classified in <u>C08L 7/00</u> - <u>C08L 21/00</u>
- Coating compositions comprising diene rubbers or their derivatives are classified in <u>C09D 107/00</u> - <u>C09D 121/00</u>
- Polymerisation of diene polymers is classified in CO8F 36/00, CO8F 136/00 or CO8F 236/00.
- Treatment or chemical modification of diene rubber is classified in <u>C08C 1/00</u> <u>C08C 19/44</u>.
- Preparation of polymer compositions is classified in CO8J 3/20 CO8J 3/22.
- Recycling of polymers is classified in C08J 11/04 C08J 11/28

# References

# Informative references

Attention is drawn to the following places, which may be of interest for search:

Adhesive compositions of copolymers of ethene-propene or ethene- propene-diene, e.g. EPM or EPDM rubber	<u>C09J 123/16</u>
Adhesive compositions of copolymers of isobutene with minor part of conjugated dienes monomers, e.g. butyl rubber	C09J 123/22
Adhesive compositions of polyacrylates	<u>C09J 133/00</u>
Adhesive compositions of unconjugated dienes	<u>C09J 147/00</u>
Adhesive compositions of graft copolymers	<u>C09J 151/00</u>
Adhesive compositions of block copolymers	<u>C09J 153/00</u>
Adhesive compositions of ABS	<u>C09J 155/02</u>
Chemical compositions of tyres	B60C 1/00
Preparation of rubber compounds	<u>C08J 3/20</u> - <u>C08J 3/22</u>
Recycling of polymers	<u>C08J 11/04</u> - <u>C08J 11/28</u>
Inorganic or non-macromolecular organic materials as compounding agents	<u>C08K</u>
Compositions of diene rubbers or their derivatives in minority	<u>C08L 7/00</u> - <u>C08L 21/00</u>

# **Special rules of classification**

Last place priority rule:

Within each group of this subclass, in the absence of an indication to the contrary, classification is made in the last appropriate place.

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

# C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# **Glossary of terms**

In this place, the following terms or expressions are used with the meaning indicated:

Rubber	a. natural or conjugated diene rubbers b. rubber in general (for a specific rubber, other than a natural rubber or a conjugated diene rubber, see the group provided for compositions of such
	macromolecular compounds)

# Synonyms and Keywords

In patent documents, the following abbreviations are often used:

ABS	Acrylonitrile butadiene styrene

BR	Butadiene rubber
CR	Chloroprene rubber
EPDM	Ethene propene diene rubber
EPM	Ethene propene rubber
lir	Butyl rubber
IR	Isoprene rubber
NBR	Acrylonitrile butadiene rubber
NR	Natural rubber
SAN	Styrene acrylonitrile copolymer
SBR	Styrene butadiene rubber

# C09J 121/00

# Adhesives based on unspecified rubbers

# **Definition statement**

#### This place covers:

Adhesive compositions based on unspecified rubbers.

# Special rules of classification

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 123/00

Adhesives based on homopolymers or copolymers of unsaturated aliphatic hydrocarbons having only one carbon-to-carbon double bond; Adhesives based on derivatives of such polymers

# **Definition statement**

#### This place covers:

Adhesives based on homopolymers or copolymers of unsaturated aliphatic hydrocarbons having only one carbon-to-carbon double bond; Adhesives based on derivatives of such polymers. Adhesive compositions based on modified polymers are classified as such in <u>C08F 8/00</u> subgroups.

# References

# Informative references

Attention is drawn to the following places, which may be of interest for search:

Organic labelling fabrics, comparable materials or articles with	B65C 5/02
deformable surface using adhesives	

Informative references

Organic labelling fabrics or comparable materials or articles with deformable surface using thermo-activatable adhesives	<u>B65C 5/04</u>
Applications or uses of polymer compositions in films	<u>C08J</u>
Working-up, compounding, after-treatment of macromolecular compounds	<u>C08J 3/00</u> - <u>C08J 11/28</u>
Use of Inorganic of non-macromolecular organic substances as compounding ingredients	<u>C08K 3/00</u> - <u>C08K 13/08</u>
Materials for sealing or packing joints or covers	<u>C09K 3/10</u>
Materials for stopping leaks	<u>C09K 3/12</u>
Organic labelling fabrics or comparable materials or articles with deformable production of multi-layer textile fabrics	<u>D06M 17/00</u>
Adhesive labels, tag tickets or similar identification of indication means	<u>G09F 3/10</u>
Encapsulation of solar cells	H01L 31/048

# **Special rules of classification**

Last place priority rule:

Within each group of this subclass, in the absence of an indication to the contrary, classification is made in the last appropriate place.

Classification guidance:

- Documents are preferably classified according to the examples in the documents, not according to general claims, e.g. if the examples only describe adhesives based on polyethylene, but if subject matter of the claim is an adhesive of polyolefin, the document is classified under adhesives of polyethylene (<u>C09J 123/06</u>).
- In <u>C09J</u>, adhesives which have only one polymeric component are also classified, e.g. <u>C09J 123/0815</u> represents an adhesive of only one ethylene vinylacetate polymer.
- Single polymers and their preparation are to be classified in <u>C08F 210/00</u> on the basis of sufficient disclosure in the document.

Choice of symbol for copolymer:

- A composition of copolymers gets the symbol of the major component, except if there is a lower class which specifies the comonomer in minority (see also last place rule), e.g. ethylene butene copolymers (ethylene comonomer in majority) would be classified in <u>C09J 123/0815</u>, and not in <u>C09J 123/20</u>, but ethylene butene copolymers (butene in majority) would be classified in <u>C09J 123/20</u>, not in <u>C09J 123/0815</u>.
- In addition, a separate C-Set representing the copolymer that is formed according to the monomers of <u>C08F</u> must also be given.

# C-Sets classification:

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of classification section in C09J 101/00.

- If <u>C09J 123/00</u> relates to a composition and two or more polymers are present, classification is given in the form of C-Sets (i.e. #C9J(c)) according to the relative weight percentage of the polymer constituents.
- The polymer in majority is given a symbol as a base symbol, and the polymers in minority are given symbols as subsequent symbols in the form of C-Sets.
- If all the constituents are present in equal weight percentage, the composition is classified according to each of these constituents.

- In the case that several polymers can be in majority, separate C-Sets should be made based on each polymer in majority and its component(s) in minority.
- Orthogonal indexing codes C08L 2201/00 C08L 2555/86 are also given if applicable.

Example 1: An adhesive of a blend of 60 parts polyethylene (<u>C09J 123/06</u>) and 40 parts polyamide (<u>C09J 177/00</u>) is classified as (<u>C09J 123/06</u>, <u>C08L 77/00</u>).

Example 2: An adhesive of a blend of 50 parts polyethylene (C09J 123/06) and 50 parts polyamide (C09J 177/00) is classified as (C09J 123/06, C08L 77/00) and (C09J 177/00, C08L 23/06).

Example 3: An adhesive based on a composition of polyethylene and containing CaCO3 is classified as (<u>C09J 123/06</u>, <u>C08K 3/26</u>). If this composition also contains a polyamide, then the classification will be (<u>C09J 123/06</u>, <u>C08L 77/00</u>, <u>C08K 3/26</u>).

Example 4: An adhesive based on a composition based on a first polyethylene (C09J 123/06) and containing a second polyethylene, a phenol and silica is classified as (C09J 123/06, C08L 23/06, C08K 5/13, C08K 3/36) and in C08L 2205/02.

Example 5: An adhesive based on a composition containing a polyamide in majority, a polyester and a polyethylene is classified as (<u>C09J 177/00</u>, <u>C08L 67/00</u>, <u>C08L 23/06</u>) and <u>C08L 2205/03</u>.

Example 6: Adhesives of compositions containing two polymers of the same subgroup, for example compositions of two ethylene vinylacetate copolymers, are characterised by the orthogonal indexing code <u>C08L 2205/025</u>. The complete classification for such a composition therefore would be (<u>C09J 123/0853</u>, <u>C08L 23/0853</u>) and <u>C08L 2205/025</u>. The same applies for compositions of two polymers only distinguished by physical properties, e.g. molecular weight or density.

### C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# **Glossary of terms**

Addition polymers	Polymers in which unsaturated monomer molecules join together to form a polymer in which the molecular formula of the repeat unit is identical (except for the double bond) with that of the monomer.
Aliphatic cyclic olefins	A carbocyclic monomer with an endocyclic double bond.
Block polymers	Polymers formed by polymerization of monomers on to a macromolecule having groups capable of inducing the formation of new polymer chains bound at one or both ends of the starting macromolecule, or by polymerization using successively different catalyst types or successively different monomer systems without deactivating the intermediate polymer.
Condensation polymers	Polymers in which water or some other simple molecule is eliminated from 2 or more monomer molecules as they combine to form the polymer or crosslinks between polymer chains.
Copolymer	Usually denotes a polymer of 2 chemically distinct monomers, and sometimes denotes a terpolymer containing more than 2 types of monomer unit.
EPR or EPDM, elastomeric ethylene propylene (diene) copolymers	Elastomeric copolymer rubbers defined by similar amounts of ethylene and propene, e.g. 30-70wt% ethylene and 70-30wt% propene.

In this place, the following terms or expressions are used with the meaning indicated:

Glossary of terms

Graft polymers	Macromolecular compounds obtained by polymerizing monomers on to preformed polymers or on to inorganic materials. Such preformed polymers could be rubbers, polysaccharides, condensation polymers, homopolymers or copolymers of the addition polymer type.
Homopolymers	Polymers resulting from the polymerisation of a single monomer or polymer with a single type of repeating unit.
lonomer	Polymers containing monomers carrying ionic groups, usually salts of carboxylic acids.
Iso-olefin	Non-linear olefinic monomers, e.g. isobutylene, isopentene.
Modified by chemical after treatment	Modification of the polymer after polymerisation; Exception: neutralisation of carboxylic acid containing polymers ( <u>C08L 23/0884</u> ) and saponification of vinylacetate in EVA ( <u>C08L 23/0861</u> ) are not regarded as after treatments in accordance with <u>C08L 23/00</u>
Repeat(ing) unit	The unit in an addition polymer which is repeated throughout the molecule; for example in polyethylene the repeat unit is: $-CH_2$ - $CH_2$
Rubber	a. Natural or conjugated diene rubbers; b. Rubber in general; c. Rubbers of <u>C08L 23/16</u> are not classified according to notation B2B, but to B2A.
Saponified vinylacetate	Ethylene copolymers with vinyl alcohol.

# Synonyms and Keywords

In patent documents the following abbreviations are often used: Attention is drawn to the table at the beginning of C09J.

# C09J 123/02

# not modified by chemical after-treatment

# **Special rules of classification**

This group should only be used in cases without examples.

# C09J 123/025

# {Copolymer of an unspecified olefine with a monomer other than an olefine}

# **Special rules of classification**

This group should only be used in cases without examples.

# C09J 123/04

# Homopolymers or copolymers of ethene

# **Special rules of classification**

This group should only be used if there are examples both of polymers of C09J 123/06 or C09J 123/0807 and C09J 123/0846.

# C09J 123/06

# Polyethene

# **Special rules of classification**

This group can be further characterised by the Indexing Codes <u>C08L 2207/062</u>, <u>C08L 2207/066</u>, <u>C08L 2207/068</u>, <u>C08L 2207/07</u> or <u>C08L 2314/02</u>-C08L 2314/08.

# C09J 123/08

# Copolymers of ethene (C09J 123/16 takes precedence)

# **Special rules of classification**

This group should only be used if there are examples both of polymers of C09J 123/0807 and C09J 123/0846.

C09J 123/16 takes precedence over this group.

# C09J 123/0807

# {Copolymers of ethene with unsaturated hydrocarbons only containing more than three carbon atoms}

# **Special rules of classification**

This group can be further characterised by Indexing Codes <u>C08L 2207/062-C08L 2207/07</u> or <u>C08L 2314/02-C08L 2314/08</u>.

It is preferable to classify in C09J 123/0815.

# C09J 123/0815

# {Copolymers of ethene with aliphatic 1-olefins}

# **Special rules of classification**

The polymers in this group can be further characterised by Indexing Codes <u>C08L 2207/062</u>-<u>C08L 2207/07</u> or <u>C08L 2314/02</u>-<u>C08L 2314/08</u>.

When ethylene is in majority, ethylene-propene copolymers are only classified when propene is clearly the minor component, e.g. LLDPE with the comonomer propene is classified in  $\underline{C09J 123/0815}$ , whereas EPR is classified in  $\underline{C09J 123/0815}$ .

# C09J 123/0823

# {Copolymers of ethene with aliphatic cyclic olefins}

# **Definition statement**

This place covers:

Adhesive compositions of copolymers of ethene with aliphatic cyclic olefins, e.g. ethylene, propene and norbornene.

# References

# **Limiting references**

This place does not cover:

Adhesive compositions of copolymers with a majority of norbornene <u>C09J 145/00</u>

# **Special rules of classification**

This group takes precedence over <u>C09J 123/0815</u>, e.g. a copolymer of ethylene, propene and norbornene.

Copolymers with majority of norbornene see C09J 145/00.

# C09J 123/083

# {Copolymers of ethene with aliphatic polyenes, i.e. containing more than one unsaturated bond}

# **Definition statement**

This place covers:

Adhesive compositions of copolymers of ethene with aliphatic polyenes, i.e. containing more than one unsaturated bond, e.g. a copolymer of ethylene, butene (small amount) and norbornene (smaller amount).

# **Special rules of classification**

This group takes precedence over C09J 123/0815.

# C09J 123/0838

# {Copolymers of ethene with aromatic monomers}

# **Definition statement**

#### This place covers:

Adhesive compositions of copolymers of ethene with aromatic monomers, e.g. copolymer of ethylene, butene (small amount) and styrene (smaller amount).

# **Special rules of classification**

This group takes precedence over C09J 123/0815.

# C09J 123/0846

# {Copolymers of ethene with unsaturated hydrocarbons containing other atoms than carbon or hydrogen atoms}

# **Definition statement**

#### This place covers:

Adhesive compositions of copolymers of ethene with unsaturated hydrocarbons containing other atoms than carbon or hydrogen atoms, e.g. copolymer of ethylene, butene (small amount) and acrylate (smaller amount).
# **Special rules of classification**

This group takes precedence over C09J 123/0815.

# C09J 123/0861

### {Saponified vinylacetate}

### **Definition statement**

This place covers:

Adhesive compositions of saponified vinylacetate (EVA), e.g. copolymer of ethylene, vinylacetate (small amount) and vinylalcohol (smaller amount).

# **Special rules of classification**

This group takes precedence over C09J 123/0861.

# C09J 123/0869

### {Acids or derivatives thereof}

# **Definition statement**

This place covers:

Adhesive compositions of ethene with acids or derivatives thereof, e.g. ethylene copolymers with vinyl sulfonic acids.

# **Special rules of classification**

<u>C09J 123/0892</u> takes precedence over this group.

# C09J 123/0876

### {Neutralised polymers, i.e. ionomers}

### **Definition statement**

*This place covers:* Ethylene carboxylic acid copolymers where H+ is replaced by M+.

### **Special rules of classification**

This group takes precedence over C09J 123/0892.

In this group, M+ is not regarded as "other atom".

# C09J 123/0884

### {Epoxide containing esters}

### **Definition statement**

This place covers:

Adhesive compositions of ethene with epoxide containing esters, e.g. ethylene copolymers with glycidyl methacrylate.

# C09J 123/0892

# {containing monomers with other atoms than carbon, hydrogen or oxygen atoms}

# References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Adhesive compositions with copolymers of ethane with copolymers	<u>C09J 133/00</u> -
of ethene with monomers with other atoms than carbon, hydrogen or	<u>C09J 143/00</u>
oxygen atoms when the olefin is in minority	

# **Special rules of classification**

This group takes precedence over C09J 123/0869.

# C09J 123/10

#### Homopolymers or copolymers of propene

### **Special rules of classification**

This group can be further characterised by Indexing Codes C08L 2207/10-C08L 2207/14 or C08L 2314/02-C08L 2314/08.

# C09J 123/12

### Polypropene

### **Definition statement**

This place covers:

Adhesive compositions of homopolymers.

### **Special rules of classification**

This group can be further characterised by Indexing Codes C08L 2207/10-C08L 2207/14 or C08L 2314/02-C08L 2314/08.

# C09J 123/14

### Copolymers of propene (C09J 123/16 takes precedence)

### **Definition statement**

This place covers:

Adhesive compositions of copolymers of propene, when the propene is in majority, e.g. ethylenepropene copolymers when ethylene is clearly the minor component.

Rubbery polymers, e.g. high a-olefin content or atactic, but no propene.

### References

#### **Limiting references**

	This place does not cover:	
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EPR	<u>C09J 123/16</u>

# **Special rules of classification**

This group can be further characterised by Indexing Codes C08L 2207/10-C08L 2207/14 or C08L 2314/02-C08L 2314/08.

# C09J 123/145

# {Copolymers of propene with monomers having more than one C=C double bond}

# **Special rules of classification**

This group takes precedence over  $\underline{C09J 123/14}$  or  $\underline{C09J 123/142}$  in the case of terpolymers even if the polyene unit is the monomer in the lowest concentration.

# C09J 123/147

# {Copolymers of propene with monomers containing other atoms than carbon or hydrogen atoms}

### **Special rules of classification**

This group takes preference over  $\underline{C09J 123/14}$  or  $\underline{C09J 123/142}$  in the case of terpolymers even if the heteroatom carrying unit is the monomer in the lowest concentration.

# C09J 123/16

# {Elastomeric} ethene-propene or ethene-propene-diene copolymers, {e.g. EPR and EPDM rubbers}

### **Definition statement**

#### This place covers:

Adhesives based on elastomeric ethene-propene or ethene-propene-diene copolymers, e.g. EPR and EPDM rubbers or polymers comprising both ethylene and propylene on about the same amount.

# **Special rules of classification**

This group takes precedence over C09J 123/0815 and C09J 123/14.

Although these polymers are rubbers or elastomers, <u>C08L 23/00</u> or subgroups are used if they not in majority.

# C09J 123/26

#### modified by chemical after-treatment

### **Special rules of classification**

C09J 123/0861 takes precedence in the case of saponified EVA.

<u>C09J 123/0876</u> takes precedence in the case of neutralised ethylene carboxylic acid copolymers (iononers).

# C09J 123/28

# by reaction with halogens or compounds containing halogen (<u>C09J 123/32</u> takes precedence)

# **Special rules of classification**

For chlorosulfonation, <u>C09J 123/32</u> takes precedence over this group.

# C09J 125/00

Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by an aromatic carbocyclic ring; Adhesives based on derivatives of such polymers

# **Definition statement**

This place covers:

- Homo- and copolymers of styrene,
- General purpose polystyrene (GPS),
- High impact polystyrene (HIPS).

# References

### Informative references

Attention is drawn to the following places, which may be of interest for search:

SBR rubber	<u>C09J 109/06</u> - <u>C09J 109/08</u>
Grafted (co)polymers	<u>C09J 151/00</u> - <u>C09J 151/10</u>
Block (co)polymers	<u>C09J 153/02</u> - C09J 153/025
Acrylonitrile butadiene styrene (ABS)	<u>C09J 155/02</u>

# **Special rules of classification**

Classification guidance:

- Classification should be made based on the examples, but not the general claims in the documents. The use of main group symbols should be avoided if there are subgroups which cover the subject matter to be classified. The classification should be made in the most indented subgroup that covers the subject matter.
- For example, a document claiming adhesive compositions of a polymer of an aromatic vinyl monomer, wherein the examples are limited to e.g. polystyrene, should be allocated the symbol <u>C09J 125/06</u> and not <u>C09J 125/04</u>, <u>C09J 125/02</u> or <u>C09J 125/00</u>.
- General purpose PS, GPS is classified in <u>C09J 125/06</u>. High impact polystyrene HIPS is classified in <u>C09J 125/06</u>, unless the rubber or rubber content is of relevance, in which case it should be classified in <u>C09J 151/04</u>.

#### C-Sets classification:

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

### C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# **Synonyms and Keywords**

In patent documents, the following abbreviations are often used:

GPS	General purpose polystyrene
HIPS	High impact polystyrene
PS	Polystyrene
SAN	Styrene acrylonitrile copolymer
SPS	Syndiotactic polystyrene

# C09J 125/08

# Copolymers of styrene (<u>C09J 129/08</u>, <u>C09J 135/06</u>, <u>C09J 155/02</u> take precedence)

# References

# Limiting references

This place does not cover:

Copolymers with allyl alcohol, even when allyl alcohol monomer is in minority	<u>C09J 129/08</u>
Copolymers with monomers according to <u>C09D 135/06</u> , even in minority	<u>C09J 135/06</u>
Copolymers with monomers according to <u>C09D 141/00</u> , even in minority	<u>C09J 141/00</u>
Copolymers with monomers according to <u>C09D 143/00</u> , even in minority	<u>C09J 143/00</u> - <u>C09J 143/04</u>

# C09J 125/10

### with conjugated dienes

### References

### Informative references

Attention is drawn to the following places, which may be of interest for search:

Styrene butadiene rubber SBR	<u>C09J 109/06</u> - <u>C09J 109/08</u>
Grafted copolymers comprising styrene and dienes	<u>C09J 151/00</u>
Block copolymers comprising styrene and dienes	<u>C09J 153/00</u>

# C09J 125/12

# with unsaturated nitriles

# References

### Informative references

Attention is drawn to the following places, which may be of interest for search:

Copolymers of unsaturated nitriles	<u>C09J 133/18</u> - <u>C09J 133/22</u>
Acrylonitrile butadiene styrene copolymers ABS	<u>C09J 155/02</u>

# C09J 125/14

# with unsaturated esters

### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Copolymers with unsaturated carboxylic acids and esters thereof	<u>C09J 133/00</u> -
	<u>C09J 133/26</u>

# C09J 127/00

Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a halogen; Adhesives based on derivatives of such polymers

# **Definition statement**

This place covers:

• Adhesives based on homo- and copolymers of vinyl mono-, di-, tri- or tetra- halogenide(s) e.g. vinyl(idene) chloride, vinyl(idene) fluoride, chlorotrifluoroethylene, tetrafluoroethylene, hexafluoropropene, etc.

### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

(per)Halogenated esters of unsaturated carboxylic acids	<u>C09J 133/16</u>
(per)Halogenated polyethers	<u>C09J 171/00</u>
Chemically modified, (post)halogenated polymers	<u>C08L 23/28, C08L 27/24</u>

# **Special rules of classification**

Classification guidance:

• Classification should be made based on the examples, but not the general claims in the documents. The use of main group symbols should be avoided if there are subgroups which

cover the subject matter to be classified. The classification should be made in the most indented subgroup that covers the subject matter.

 For example, a document claiming adhesive compositions of a fluorinated polymer, wherein the examples are limited to e.g. poly(tetrafluoroethylene), should be classified in <u>C09J 127/18</u> and not in <u>C09J 127/12</u>.

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

### **Synonyms and Keywords**

CTFE	Chlorotrifluoroethene, chlorotrifluoroethylene
HFP	Hexafluoropropene, hexafluoropropylene
PTFE	Poly (tetrafluoroethene), poly (tetrafluoroethylene)
PVC	Poly (vinyl chloride)
PVDC	Poly (vinylidene chloride)
PVDF	Poly (vinylidene fluoride)
PVF	Poly (vinyl fluoride)

In patent documents, the following abbreviations are often used:

# C09J 127/12

#### containing fluorine atoms

### **Definition statement**

This place covers:

- Adhesives based on (co)polymers of fluorine containing unsaturated monomers other than those covered by <u>C09J 127/14-C09J 127/20</u>.
- Adhesives based on (co)polymers of fluorine containing unsaturated monomers having additional halogen atom(s) other than fluorine, e.g. (co)polymers of chlorotrifluoroethylene

# C09J 129/00

Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by an alcohol, ether, aldehydo, ketonic, acetal, or ketal radical; Adhesives based on hydrolysed polymers of esters of unsaturated alcohols with saturated carboxylic acids; Adhesives based on derivatives of such polymers

### **Definition statement**

*This place covers:* Adhesives based on homopolymers or copolymers Definition statement

- of unsaturated alcohols, e.g. polyvinyl alcohol
- of unsaturated ketones
- of acetals or ketals obtained by polymerisation of unsaturated acetals or ketals or by aftertreatment of polymers of unsaturated alcohols

Adhesives based on partially hydrolysed homopolymers or copolymers of esters of unsaturated alcohols with saturated carboxylic acids, e.g. copolymers of allyl alcohol.

# **Special rules of classification**

Classification guidance:

- Classification should be made based on the examples, but not the general claims in the documents. The use of main group symbols should be avoided if there are subgroups which cover the subject matter to be classified. The classification should be made in the most indented subgroup that covers the subject matter.
- For example, a document claiming adhesive compositions of a polymer of an unsaturated alcohol monomer, wherein the examples are limited to e.g. polyvinyl alcohol, should be classified in <u>C09J 129/04</u> and not in <u>C09J 129/02</u> or <u>C09J 129/00</u>.

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# Synonyms and Keywords

EVA or E-VA	Ethylene vinyl alcohol copolymer or ethylene vinyl acetate copolymer
PVA	Poly(vinyl alcohol) or poly(vinyl acetate)
PVB	Poly (vinyl butyral)
PVOH	Poly (vinyl alcohol)

# C09J 129/04

Polyvinyl alcohol; Partially hydrolysed homopolymers or copolymers of esters of unsaturated alcohols with saturated carboxylic acids

# **Definition statement**

This place covers:

Homo- and co-polymers of vinyl alcohol

Saponified or hydrolysed (co)polymers of vinyl esters of saturated acids, e.g. saponified or hydrolysed (co)polymers of vinyl acetate.

# References

# Limiting references

This place does not cover:

Ethylene/vinyl alcohol copolymers in which ethylene is in majority	C09J 123/0861
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# C09J 129/08

#### with vinyl aromatic monomers

# **Definition statement**

This place covers:

Copolymers with styrene, even when styrene is in majority.

# C09J 129/10

# Homopolymers or copolymers of unsaturated ethers (<u>C09J 135/08</u> takes precedence)

# **Special rules of classification**

C09J 135/08 takes precedence over this group, i.e. copolymers with monomers according to C09J 135/08, e.g. unsaturated dicarboxylic acids, anhydrides or esters, are classified in C09J 135/08 only, even when these monomers are in minority.

# C09J 131/00

Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-tocarbon double bond, and at least one being terminated by an acyloxy radical of a saturated carboxylic acid, of carbonic acid, or of a haloformic acid (based on hydrolysed polymers <u>C09J 129/00</u>); Adhesives based on derivatives of such polymers

# **Definition statement**

#### This place covers:

Adhesive compositions based on homopolymers or copolymers of

- esters of monocarboxylic acids, e.g. of vinyl acetate
- esters of polycarboxylic acids, e.g. of phthalic acid.

### References

### **Limiting references**

This place does not cover:

Hydrolised or saponified polymers thereof	<u>C09D 129/00</u>
Hydrolised or saponified polymers thereof	<u>C09D 129/00</u>

# **Special rules of classification**

Classification guidance:

• Classification should be made based on the examples, but not the general claims in the documents. The use of main group symbols should be avoided if there are subgroups which

cover the subject matter to be classified. The classification should be made in the most indented subgroup that covers the subject matter.

• For example, a document claiming adhesive compositions of a (co)polymer of an unsaturated ester of a saturated carboxylic acid monomer, wherein the examples are limited to, e.g. polyvinyl acetate, should receive the symbol <u>C09J 131/04</u> and not <u>C09J 131/02</u> or <u>C09J 131/00</u>.

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# **Synonyms and Keywords**

In patent documents, the following abbreviations are often used:

EVA or E-VA	Ethylene Vinyl Acetate copolymer or Ethylene Vinyl Alcohol copolymer
PVA	Poly(Vinyl Acetate) or Poly(Vinyl Alcohol)
PVAC or PVAc	Poly (Vinyl Acetate)

# C09J 133/00

Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by only one carboxyl radical, or of salts, anhydrides, esters, amides, imides, or nitriles thereof; Adhesives based on derivatives of such polymers

# **Definition statement**

#### This place covers:

Adhesive compositions of homopolymers or copolymers having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by only one carboxyl radical, or of salts, anhydrides, esters, amides, imides, or nitriles thereof, e.g. acrylamide, methacrylamide or acrylic acid esters.

# References

### Informative references

Attention is drawn to the following places, which may be of interest for search:

Adhesives from diene rubbers containing carboxylic groups	<u>C09J 113/00</u>
Adhesives for nail coating	<u>A45D 20/00</u>
Diapers	<u>A61F</u>
Applications or uses of polymer compositions in films	<u>C08J</u>
Polymer compositions	<u>C08L 33/00</u>
Coatings	<u>C09D 133/00</u>

Electrical cables and wires	<u>H01B</u>
Encapsulation of solar cells	H01L 31/048

# **Special rules of classification**

Last place priority rule:

Within each subgroup of this group, in the absence of an indication to the contrary, classification is made in the last appropriate place.

• For example, adhesives comprising terpolymers of styrene, vinyl acetate and methyl methacrylate in similar proportions would be classified in <u>C09J 133/12</u> instead of <u>C09J 125/00</u> or <u>C09J 131/00</u>.

Classification guidance:

- The monomer composition of the main polymer component can be characterised by a C-Set in <u>C08F</u> on the basis of sufficient disclosure in the description or claims.
- Documents are preferably classified according to the examples in the documents, not according to general claims, e.g. if the examples only describe adhesives of acrylic copolymers, but subject matter of the claim is a composition of acrylamide copolymer, the document is classified as adhesive of acrylamide copolymers (C09J 133/26, C08L 23/00).
- The classification of the main component polymer of the composition should be according to the most specific, or reactive monomer, e.g. glycidyl methacrylate and not methyl methacrylate in a copolymer of glycidyl methacrylate and methyl methacrylate. All comonomers of the main polymeric component should be characterised by symbols in <u>C08F</u>, e.g. <u>C08F 220/32</u> and <u>C08F 220/14</u>.

Choice of symbol for copolymers:

- In an adhesive comprising a copolymer, the copolymer is given the symbol on the basis of the major monomer component, except if there is a lower symbol which specifies the comonomer in minority.
- An adhesive composition based on a copolymer of ethylene and acrylic acid therefore is to be classified in <u>C09J 123/0869</u> (ethylene in majority), but in <u>C09J 133/02</u> if acrylic acid is in majority. However, an adhesive based on a copolymer of acrylic ester and acrylonitrile (acrylic ester in majority) would be classified in <u>C09J 133/20</u>.
- The classification of the main component polymer of the adhesive should be according to the most specific, or reactive monomer (i.e. glycidyl methacrylate and not methyl methacrylate in a copolymer of glycidyl methacrylate and methyl methacrylate).
- Thus adhesives comprising copolymers wherein anhydride, carboxylic acid or metal salt containing monomers are present are classified in <u>C09J 133/064</u>; copolymers wherein hydroxyl-containing monomers are present are classified in <u>C09J 133/064</u>, copolymers wherein glycidyl-containing monomers are present are classified in <u>C09J 133/068</u>.
- In addition, a separate C-Set representing the copolymer that is formed according to the monomers of <u>C08F</u> must also be given.

#### **C-sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

- If <u>C09J 133/00</u> relates to a composition and two or more polymers are present, classification is given in the form of C-Sets (i.e. #C9J(c)) according to the relative weight percentage of the polymer constituents.
- The polymer in majority is given a symbol as a base symbol, and the polymers in minority are given symbols as subsequent symbols in the form of C-Sets.
- In addition, a single symbol is given according to the macromolecular constituent present in the highest proportion.

- If all the constituents are present in equal weight percentage, the composition is classified according to each of these constituents.
- In the case that several polymers can be in majority, separate C-Sets should be made based on each polymer in majority and its component(s) in minority.
- Orthogonal indexing codes C08L 2201/00 C08L 2555/86 are also given if applicable.

Example 1: An adhesive composition of 60 parts polymethyl methacrylate (<u>C09J 133/12</u>) and 40 parts polyamide (<u>C08L 77/00</u>) is classified as (<u>C09J 133/12</u>, <u>C08L 77/00</u>).

Example 2: An adhesive composition of 50 parts polymethyl methacrylate (C09J 133/12) and 50 parts polyamide (C09J 177/00) is classified as (C09J 133/12, C08L 77/00) and (C09J 177/00, C08L 33/12).

Example 3: An adhesive composition based on polymethyl methacrylate and containing CaCO3 is classified as (C09J 133/12, C08K 3/26). If this composition contains also a polyamide, then the classification will be (C09J 133/12, C08L 77/00, C08K 3/26).

Example 4: An adhesive composition based on a first polymethyl methacrylate (C09J 133/12) and containing as a second polymer a copolymer of acrylic acid, a phenol and silica is classified as (C09J 133/12, C08L 33/02, C08K 5/13, C08K 3/36) and in C08L 2205/02.

Example 5: A composition containing a polyamide in majority, a polyester and a polymethyl methacrylate is classified as (<u>C09J 177/00</u>, <u>C08L 67/00</u>, <u>C08L 33/12</u>) and in <u>C08L 2205/03</u>.

Example 6: Adhesive compositions containing two polymers of the same dot group, for example compositions of two polymers amhydroxyl containing acrylic ester, are characterised by the orthogonal indexing code <u>C08L 2205/025</u>. The complete classification for such compositions, therefore, would be (<u>C09J 133/066</u>, <u>C08L 33/066</u>) and <u>C08L 2205/025</u>. The same applies for compositions of two polymers only distinguished by physical properties, e.g. molecular weight or density.

#### C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

### **Glossary of terms**

In this place, the following terms or expressions are used with the meaning indicated: Attention is drawn to the glossary of C09J 123/00.

# **Synonyms and Keywords**

In patent documents the following abbreviations are often used: Attention is drawn to the table after the title of  $\underline{C09J}$ .

# C09J 133/02

### Homopolymers or copolymers of acids; Metal or ammonium salts thereof

# References

#### Limiting references

This place does not cover:

Copolymers containing bicarboxylic acids in majority	<u>C09J 135/00</u>
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# C09J 133/04

# Homopolymers or copolymers of esters {(C09J 143/04 takes precedence)}

# **Special rules of classification**

All of <u>C09J 137/00-C09J 143/04</u>, <u>C09J 133/064-C09J 133/068</u> and <u>C09J 133/14-C09J 133/26</u> take precedence over this group, even if the corresponding monomers are in minority.

This group should be used if the nature of the acrylic ester polymer is not specified.

# C09J 133/06

# of esters containing only carbon, hydrogen and oxygen, the oxygen atom being present only as part of the carboxyl radical

#### **Definition statement**

This place covers:

Adhesive compositions based on all alkyl alkylacrylate monomers.

# References

#### Limiting references

This place does not cover:

Adhesive compositions based on acrylic acid esters or methacrylic acid	<u>C09J 133/08</u> -
esters with alkanols or phenols, without having additional functional	<u>C09J 133/12</u>
groups, e.g. methyl ethylacrylate	

# C09J 133/062

### {Copolymers with monomers not covered by C09J 133/06}

### References

#### Limiting references

This place does not cover:

Adhesive compositions based on monomers which have OH, glycidyl, anhydride or additional acid groups	<u>C09J 133/064</u> - C09J 133/068
Adhesive compositions based on monomers which have halogen, nitrogen, sulfur, or oxygen	<u>C09J 133/14</u>

# C09J 133/064

# {containing anhydride, COOH or COOM groups, with M being metal or oniumcation}

### **Definition statement**

#### This place covers:

Acrylic adhesive compositions based on maleic acid or derivative containing polymers having maleic acid in minority.

# References

# Limiting references

This place does not cover:

Acrylic adhesive compositions based on maleic acid or derivative containing polymers having an olefin acid in majority	<u>C09J 123/0869</u>
Acrylic adhesive compositions based on maleic acid or derivative containing polymers having maleic acid in majority	<u>C09J 135/00</u>

# C09J 133/066

# {containing -OH groups}

# **Definition statement**

This place covers:

Adhesive compositions based on polymers containing hydroxyethyl methacrylate (HEMA).

# C09J 133/068

# {containing glycidyl groups}

# **Definition statement**

*This place covers:* Adhesive compositions based on polymers containing glycidyl methacrylate.

# C09J 133/08

# Homopolymers or copolymers of acrylic acid esters

# **Definition statement**

This place covers:

Adhesive composition based on homopolymers or copolymers which are esters of acrylic acid or methacrylic acid.

# References

### **Limiting references**

This place does not cover:

Adhesive composition based on copolymers of other alkylacrylates	<u>C09J 133/06</u>
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# **Special rules of classification**

All of <u>C09J 137/00-C09J 143/00</u>, <u>C09J 133/062-C09J 133/068</u> and <u>C09J 133/14-C09J 133/26</u> take precedence over this group even if the corresponding monomers are in minority.

# C09J 133/10

# Homopolymers or copolymers of methacrylic acid esters

# **Special rules of classification**

In copolymers, all of <u>C09J 137/00-C09J 143/04</u>, <u>C09J 133/062-C09J 133/068</u> and <u>C09J 133/14-C09J 133/26</u> take precedence over this group even if the corresponding monomers are in minority.

# C09J 133/14

# of esters containing halogen, nitrogen, sulfur or oxygen atoms in addition to the carboxy oxygen

### **Definition statement**

#### This place covers:

Adhesive compositions based on acrylic esters of polyethylene ethers, methoxymethacrylate or amino substituted acrylate esters.

# **Special rules of classification**

All of <u>C09J 133/064-C09J 133/068</u>, <u>C09J 137/00-C09J 143/00</u> and <u>C09J 133/18-C09J 133/26</u> take precedence over this group.

# C09J 135/00

Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-tocarbon double bond, and at least one being terminated by a carboxyl radical, and containing at least another carboxyl radical in the molecule, or of salts, anhydrides, esters, amides, imides or nitriles thereof; Adhesives based on derivatives of such polymers

### **Definition statement**

#### This place covers:

Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a carboxyl radical, and containing at least another carboxyl radical in the molecule, or of salts, anhydrides, esters, amides, imides or nitriles thereof; Adhesives based on derivatives of such polymers. Bonding using organic-inorganic elastomer and elastomeric substances obtained by co-polymerisation of maleic anhydride, vinyl stearate and a vinyl alkoxy silane with or without vinyl formate.

# References

### Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Applications or uses of polymer compositions in laminates	<u>B32B</u>
Applications or uses of polymer compositions in films	<u>C08J</u>
Working-up, compounding, after-treatment of macromolecular compounds	<u>C08J 3/00</u> - <u>C08J 11/28</u>

### Informative references

Attention is drawn to the following places, which may be of interest for search:

Adhesives based on compositions of polymerisable monomers	<u>C09J 4/00</u>
Adhesives for nail coatings	<u>A45D 29/00</u>
Adhesives for diapers	<u>A61F</u>
Use of Inorganic of non-macromolecular organic substances as compounding ingredients	<u>C08K 3/00</u> - <u>C08K 13/08</u>
Polymer compositions	<u>C08L 35/00</u>
Coatings	<u>C09D 135/00</u>

# **Special rules of classification**

Last place priority rule:

Within each subgroup of this group, in the absence of an indication to the contrary, classification is made in the last appropriate place.

Classification guidance:

- Documents are preferably classified according to the examples in the documents, not according to general claims, e.g. if the examples only describe adhesives of compositions of styrene-maleic anhydride, but subject matter of the claim is an adhesive of a composition of a vinyl aromatic copolymer, the document is classified as adhesive composition of styrene maleic anhydride copolymer <u>C09J 135/06</u>.
- In <u>C09J</u>, adhesives which have only one polymeric component is also classified, e.g. <u>C09J 135/06</u> for an adhesive of only one maleic anhydride copolymer.
- For Copolymers

In an adhesive comprising a copolymer, the copolymer is given the symbol on the basis of the major component, except if there is a lower symbol which specifies the comonomer in minority (see also last place rule), i.e. ethylene maleic anhydride copolymers (ethylene in majority) would be classified in <u>C09J 123/0869</u>, and not in <u>C09J 135/00</u>, but ethylene maleic anhydride copolymers (maleic anhydride in majority) would be classified in <u>C09J 135/00</u>, not in <u>C09J 123/0869</u>.

#### C-sets classification:

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

- If <u>C09J 135/00</u> relates to a composition and two or more polymers are present, classification is given in the form of C-Sets (i.e. #C9Jc) according to the relative weight percentage of the polymer constituents.
- The polymer in majority is given a symbol as a base symbol, and the polymers in minority are given symbols as subsequent symbols in the form of C-Sets.
- In addition, a single symbol is given according to the macromolecular constituent present in the highest proportion.
- If all the constituents are present in equal weight percentage, the composition is classified according to each of these constituents.
- In the case that several polymers can be in majority, separate C-Sets should be made based on each polymer in majority and its component(s) in minority.
- Orthogonal indexing codes <u>C08L 2201/00</u> <u>C08L 2555/86</u> are also given if applicable.

Example 1: An adhesive of a blend of 60 parts styrene-maleic anhydride copolymer (<u>C09J 135/06</u>) and 40 parts polyamide (<u>C09J 177/00</u>) is classified as (<u>C09J 135/06</u>, <u>C08L 77/00</u>).

Example 2: An adhesive of a blend of 50 parts styrene-maleic anhydride copolymer (C09J 135/06) and 50 parts polyamide (C09J 177/00) is classified as (C09J 135/06, C08L 77/00) and (C09J 177/00, C08L 35/06).

Example 3: An adhesive of a composition based on styrene-maleic anhydride copolymer and containing CaCO3 is classified as (C09J 135/06, C08K 3/26). If this composition contains also a polyamide, then the classification will be (C09J 135/06, C08L 77/00, C08K 3/26).

Example 4: An adhesive of a composition based on a first styrene-maleic anhydride copolymer (<u>C09J 135/06</u>) and containing a second styrene-maleic anhydride copolymer, a phenol and silica is classified as (<u>C09J 135/06</u>, <u>C08L 35/06</u>, <u>C08K 5/13</u>, <u>C08K 3/36</u>) and in <u>C08L 2205/025</u>.

Example 5: An adhesive of a composition containing a polyamide in majority, a polyester and a styrene-maleic anhydride copolymer is classified as (<u>C09J 177/00</u>, <u>C08L 67/00</u>, <u>C08L 35/06</u>) and in <u>C08L 2205/03</u>.

Example 6: An adhesive of compositions containing two polymers of the same dot group, for example compositions of two styrene-maleic anhydride copolymer polymers, are characterised by the orthogonal indexing code  $\underline{C08L}$  2205/025. The complete classification for such compositions therefore would be ( $\underline{C09J}$  135/06,  $\underline{C08L}$  35/06) and  $\underline{C08L}$  2205/025. The same applies for adhesive compositions of two polymers only distinguished by physical properties, i.e. molecular weight or density.

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated: Attention is drawn to the glossary of C09J 123/00.

# **Synonyms and Keywords**

In patent documents the following abbreviations are often used:

Attention is drawn to the table after the title of C09J.

# C09J 135/02

# Homopolymers or copolymers of esters (<u>C09J 135/06</u>, <u>C09J 135/08</u> take precedence)

### References

### Limiting references

This place does not cover:

Adhesives based on copolymers of unsaturated esters, e.g. acrylic ester	<u>C09J 133/00</u>
with a monomer of C09J 135/00, e.g. maleic anhydride which have the	
ester in majority	

# **Special rules of classification**

Maleic anhydride should be characterised by an Indexing Code of CO8F, e.g. CO8F 222/04.

Groups <u>C09J 135/06</u> and <u>C09J 135/08</u> take precedence over this group.

# C09J 135/04

# Homopolymers or copolymers of nitriles (<u>C09J 135/06</u>, <u>C09J 135/08</u> take precedence)

### References

#### **Limiting references**

This place does not cover:

Adhesives of copolymers of unsaturated nitriles, e.g. acrylonitrile with a	<u>C09J 133/00</u>
monomer of <u>C09J 135/00</u> , e.g. maleic anhydride which have the nitrile in	
majority	

# **Special rules of classification**

Maleic anhydride should be characterised by an Indexing Code of CO8F, e.g. CO8F 222/04.

Groups <u>C09J 135/06</u> and <u>C09J 135/08</u> take precedence over this group.

# C09J 135/06

### Copolymers with vinyl aromatic monomers

#### References

#### Limiting references

This place does not cover:

Adhesives based on copolymers of vinyl aromatic compounds, e.g.	<u>C09J 125/00</u>
styrene with a monomer of C09J 135/00, e.g. maleic anhydride which	
have the vinyl aromatic compound in majority	

### **Special rules of classification**

Maleic anhydride should be characterised by an Indexing Code of C08F, e.g. C08F 222/04.

Groups C09J 135/06 and C09J 135/08 take precedence over this group.

# C09J 135/08

#### **Copolymers with vinyl ethers**

### References

#### **Limiting references**

This place does not cover:

Adhesives based on copolymers of vinylethers with a monomer of	<u>C09J 129/10</u>
C09J 135/00, e.g. maleic anhydride which have the vinylether in majority	

# **Special rules of classification**

Maleic anhydride should be characterised by an Indexing Code of CO8F, e.g. CO8F 222/04.

# C09J 137/00

Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-tocarbon double bond, and at least one being terminated by a heterocyclic ring containing oxygen (based on polymers of cyclic esters of polyfunctional acids <u>C09J 131/00</u>; based on polymers of cyclic anhydrides of unsaturated acids <u>C09J 135/00</u>); Adhesives based on derivatives of such polymers

# **Definition statement**

#### This place covers:

Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a heterocyclic ring containing oxygen; adhesives based on derivatives of such polymers, bonding using a non-volatile organic binder having 2-vinyl-1,3cyclic acetal radicals.

# References

#### Limiting references

This place does not cover:

Adhesives based on polymers of cyclic esters of polyfunctional acids; based on polymers of cyclic anhydrides of unsaturated acids	<u>C09J 131/00</u>
Adhesives based on polymers of cyclic anhydrides of unsaturated acids	<u>C09J 135/00</u>

### Informative references

Attention is drawn to the following places, which may be of interest for search:

Adhesives based on compositions of polymerisable monomers	<u>C09J 4/00</u>
Adhesives for nail coatings	<u>A45D 20/00</u>
Adhesives in diapers	<u>A61F</u>
ß Applications or uses of polymer compositions in films	<u>C08J</u>
Polymer compositions	<u>C08L 37/00</u>
Coatings	<u>C09D 137/00</u>
Encapsulation of solar cells	H01L 31/048

# **Special rules of classification**

Last place priority rule:

Within each subgroup of this group, in the absence of an indication to the contrary, classification is made in the last appropriate place.

Classification guidance

- Documents are preferably classified according to the examples in the documents, not according to general claims, e.g. if the examples only describe adhesives of compositions of diene vinylfuran copolymers, but subject matter of the claim is an adhesive of a composition of a diene copolymer, the document is classified as adhesive composition of a vinyl furan copolymer <u>C09J 137/00</u>.
- In <u>C09J</u>, adhesives having only one polymeric component are also classified, e.g. <u>C09J 137/00</u>, an adhesive consisting of one vinyl furan copolymer.

#### C-Sets classification:

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

- If <u>C09J 137/00</u> relates to a composition and two or more polymers are present, classification is given in the form of C-Sets (i.e. #C9J(c)) according to the relative weight percentage of the polymer constituents.
- The polymer in majority is given a symbol as a base symbol, and the polymers in minority are given symbols as subsequent symbols in the form of C-Sets.
- A single symbol is given according to the macromolecular constituent present in the highest proportion.
- If all the constituents are present in equal weight percentage, the composition is classified according to each of these constituents.
- In the case that several polymers can be in majority, separate C-Sets should be made based on each polymer in majority and its component(s) in minority.
- Orthogonal indexing codes <u>C08L 2201/00</u> <u>C08L 2555/86</u> are also given if applicable.
- Common adhesive ingredients like tackifying resins or waxes only get a C-Set classification in <u>C09J 137/00</u> if they have characterising features for the composition.

Example 1: An adhesive of a blend of 60 parts diene vinylfuran copolymer (<u>C09J 137/00</u>) and 40 parts polyamide (<u>C09J 177/00</u>) is classified as (<u>C09J 137/00</u>, <u>C08L 77/00</u>).

Example 2: An adhesive of a blend of 50 parts diene vinylfuran copolymer (<u>C09J 137/00</u>) and 50 parts polyamide (<u>C09J 177/00</u>) is classified as (<u>C09J 137/00</u>, <u>C08L 77/00</u>) and (<u>C09J 177/00</u>, <u>C08L 37/00</u>).

Example 3: An adhesive of a composition based on diene vinylfuran copolymer and containing CaCO3 is classified as (<u>C09J 137/00</u>, <u>C08K 3/26</u>). If this composition contains also a polyamide, then the classification will be (<u>C09J 137/00</u>, <u>C08L 77/00</u>, <u>C08K 3/26</u>).

Example 4: An adhesive of a composition based on a first diene vinylfuran copolymer (<u>C09J 137/00</u>) and containing a second diene vinylfuran copolymer, a phenol and silica is classified as (<u>C09J 137/00</u>, <u>C08L 37/00</u>, <u>C08K 5/13</u>, <u>C08K 3/36</u>) and in <u>C08L 2205/025</u>.

Example 5: An adhesive of a composition containing a polyamide in majority, a polyester and a diene vinylfuran copolymer is classified as (<u>C09J 177/00</u>, <u>C08L 67/00</u>, <u>C08L 37/00</u>) and in <u>C08L 2205/03</u>.

Example 6: An adhesive of compositions containing two polymers of the same dot group, for example compositions of two diene vinylfuran copolymer polymers, are characterised by the orthogonal indexing code <u>C08L 2205/025</u>. The complete classification for such compositions therefore would be (<u>C09J 137/00</u>, <u>C08L 37/00</u>) and <u>C08L 2205/025</u>. The same applies for adhesive compositions of two polymers only distinguished by physical properties, e.g. molecular weight or density.

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# **Glossary of terms**

In this place, the following terms or expressions are used with the meaning indicated: Attention is drawn to the glossary of C09J 123/00.

# Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

Attention is drawn to the table after the title of <u>C09J</u>.

# C09J 139/00

Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a single or double bond to nitrogen or by a heterocyclic ring containing nitrogen; Adhesives based on derivatives of such polymers

# **Definition statement**

This place covers:

Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a single or double bond to nitrogen or by a heterocyclic ring containing nitrogen; Adhesives based on derivatives of such polymers

# References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Acrylic copolymers of amides and imides	<u>C09J 133/22</u> - <u>C09J 133/26</u>
Adhesives for nail coatings	<u>A45D 20/00</u>
Adhesives in diapers	<u>A61F</u>
Applications or uses of polymer compositions in films	<u>C08J</u>
Polymer compositions	<u>C08L 39/00</u>
Applications or uses of polymer compositions in coatings	<u>C09D 139/00</u>
Encapsulation of solar cells	H01L 31/048

# **Special rules of classification**

Last place priority rule:

Within each subgroup of this group, in the absence of an indication to the contrary, classification is made in the last appropriate place.

Classification guidance:

- Documents are preferably classified according to the examples in the documents, not according to general claims, e.g. if the examples only describe adhesives based on an acrylic polymer containing vinyl pyrrolidone, but subject matter of the claim is an acrylic adhesive, the document is classified under adhesives of vinyl pyrrolidone copolymer <u>C09J 139/06</u>.
- In <u>C09J</u>, adhesives which have only one polymeric component are classified, e.g. <u>C09J 139/06</u> represents an adhesive of only one vinyl pyrrolidone copolymer.

For Copolymers:

• <u>C09J 139/00</u> may also be given when the monomer described therein is in minority in the copolymer of an adhesive composition. An adhesive based on a copolymer of acrylic ester and vinyl pyridine, which has a lower content of vinyl pyridine than acrylic ester, would also be classified in <u>C09J 139/08</u>. Additional classification in <u>C09D 133/08</u> should be considered.

#### C-Sets classification:

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

- If <u>C09J 139/00</u> relates to a composition and two or more polymers are present, classification is given in the form of C-Sets (i.e. #C9J(c)) according to the relative weight percentage of the polymer constituents.
- The polymer in majority is given a symbol as a base symbol, and the polymers in minority are given symbols as subsequent symbols in the form of C-Sets.
- In addition, a single symbol is given according to the macromolecular constituent present in the highest proportion.
- If all the constituents are present in equal weight percentage, the composition is classified according to each of these constituents.
- In the case that several polymers can be in majority, separate C-Sets should be made based on each polymer in majority and its component(s) in minority.
- Orthogonal indexing codes C08L 2201/00 C08L 2555/86 are also given if applicable.
- Common adhesive ingredients like tackifying resins or waxes only get a C-Set classification in <u>C09J 139/00</u> if they have characterising features for the composition.

Example 1: An adhesive of a blend of 60 parts vinyl pyridine copolymer (<u>C09J 139/08</u>) and 40 parts polyamide (<u>C09J 177/00</u>) is classified as (<u>C09J 139/00</u>, <u>C08L 77/00</u>).

Example 2: An adhesive of a blend of 50 parts vinyl pyridine copolymer (<u>C09J 139/08</u>) and 50 parts polyamide (<u>C09J 177/00</u>) is classified as (<u>C09J 139/08</u>, <u>C08L 77/00</u>) and (<u>C09J 177/00</u>, <u>C08L 39/08</u>).

Example 3: An adhesive based on a composition of vinyl pyridine copolymer and containing CaCO3 is classified as (<u>C09J 139/08</u>, <u>C08K 3/26</u>). If this composition contains also a polyamide, then the classification will be (<u>C09J 139/08</u>, <u>C08L 77/00</u>, <u>C08K 3/26</u>).

Example 4: An adhesive based on a composition based on a first vinyl pyridine copolymer (<u>C09J 139/08</u>) and containing a second vinyl pyridine copolymer, a phenol and silica is classified as (<u>C09J 139/08</u>, <u>C08L 39/08</u>, <u>C08K 5/13</u>, <u>C08K 3/36</u>) and in <u>C08L 2205/025</u>.

Example 5: An adhesive based on a composition containing a polyamide in majority, a polyester and a vinyl pyridine copolymer is classified as (<u>C09J 177/00</u>, <u>C08L 67/00</u>, <u>C08L 39/08</u>) and in <u>C08L 2205/03</u>.

Example 6: Adhesives of compositions containing two polymers of the same subgroup, for example compositions of two vinyl pyridine copolymers, are characterised by the orthogonal indexing code <u>C08L 2205/025</u>. The complete classification for such a composition therefore would be (<u>C09J 139/08</u>, <u>C08L 39/08</u>) and <u>C08L 2205/025</u>. The same applies for compositions of two polymers only distinguished by physical properties (e.g. molecular weight, density etc.)

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# **Glossary of terms**

In this place, the following terms or expressions are used with the meaning indicated:

Attention is drawn to the glossary of C09J 123/00.

# Synonyms and Keywords

In patent documents the following abbreviations are often used:

Attention is drawn to the table after the title of <u>C09J</u>.

# C09J 141/00

Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a bond to sulfur or by a heterocyclic ring containing sulfur; Adhesives based on derivatives of such polymers

# **Special rules of classification**

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of  $\frac{C09J \ 101/00}{C09J \ 101/00}$ .

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 143/00

Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and containing boron, silicon, phosphorus, selenium, tellurium, or a metal; Adhesives based on derivatives of such polymers

### **Definition statement**

This place covers:

Adhesive compositions based on homopolymers or copolymers of compounds corresponding to groups <u>C08F 30/00</u>, <u>C08F 130/00</u> or <u>C08F 230/00</u>.

### References

### Informative references

Attention is drawn to the following places, which may be of interest for search:

Adhesive tapes, glue sticks, other features of adhesives	<u>C09J 5/00</u> - <u>C09J 11/00</u>
Adhesives of ethylene copolymers of silane or phosphorous containing compounds	<u>C09J 123/0892</u>
Adhesives of propene copolymers of silane or phosphorous containing compounds	<u>C09J 123/10</u>
Acrylic adhesive compositions	<u>C09J 133/00</u>
Adhesives for nail coatings	<u>A45D 20/00</u>
Adhesives for diapers	<u>A61F</u>
Applications or uses of polymer compositions in films	<u>C08J</u>
Polymer compositions	<u>C08L 43/00</u>
Applications or uses of polymer compositions in coatings	<u>C09D 143/00</u>
Encapsulation of solar cells	H01L 31/048

# **Special rules of classification**

Last place priority rule:

Within each subgroup of this group, in the absence of an indication to the contrary, classification is made in the last appropriate place.

Classification guidance:

- Documents are preferably classified according to the examples in the documents, not according to general claims, e.g. if the examples only describe adhesives based on an acrylic polymer containing vinyl silane, but subject matter of the claim is an acrylic adhesive, the document is classified under adhesives of vinyl silane copolymer (<u>C09J 143/04</u>).
- In <u>C09J 143/00</u>, adhesives which have only one polymeric component are also classified, e.g. <u>C09J 143/04</u>, an adhesive consisting of only one vinyl silane polymer.
- Further subdivisions:

<u>C09J 143/02</u>: Adhesive compositions based on copolymers of ethylene or propene are not classified in this group.

<u>C09J 143/04</u>: Adhesive compositions based on copolymers of ethylene or propene are not classified in this group.

• For Copolymers:

<u>C09J 143/00</u> may also be given when the monomer described therein is in minority in the copolymer of a coating composition. An adhesive based on a copolymer of acrylic ester and vinyl silane, which has a lower content of vinyl silane than acrylic ester, would also be classified in <u>C09J 143/04</u>. Additional classification in <u>C09J 133/08</u> should be considered.

The comonomer in majority should get a symbol in <u>C08F</u>, e.g. <u>C08F 220/10</u> for acrylic esters.

However, if the major comonomer is ethylene or propene, the corresponding copolymer compositions are classified in C09J 123/0892 or C09J 123/147.

### C-Sets classification:

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

- If <u>C09J 143/00</u> relates to a composition and two or more polymers are present, classification is given in the form of C-Sets (i.e. #C9J(c)) according to the relative weight percentage of the polymer constituents.
- The polymer in majority is given a symbol as a base symbol, and the polymers in minority are given symbols as subsequent symbols in the form of C-Sets.
- In addition, a single symbol is given according to the macromolecular constituent present in the highest proportion.
- If all the constituents are present in equal weight percentage, the composition is classified according to each of these constituents.
- In the case that several polymers can be in majority, separate C-Sets should be made based on each polymer in majority and its component(s) in minority.
- Orthogonal indexing codes <u>C08L 2201/00</u> <u>C08L 2555/86</u> are also given if applicable.
- Common adhesive ingredients like tackifying resins or waxes only get a C-Set classification in <u>C09J 143/00</u> if they have characterising features for the composition.

Example 1: An adhesive of a blend of 60 parts vinyl silane copolymer (<u>C09J 143/04</u>) and 40 parts polyamide (<u>C09J 177/00</u>) is classified as (<u>C09J 143/04</u>, <u>C08L 77/00</u>).

Example 2: An adhesive of a blend of 50 parts vinyl silane copolymer ( $\underline{C09J 143/04}$ ) and 50 parts polyamide ( $\underline{C09J 177/00}$ ) is classified as ( $\underline{C09J 143/04}$ ,  $\underline{C08L 43/04}$ ) and ( $\underline{C09J 177/00}$ ,  $\underline{C08L 43/04}$ ).

Example 3: An adhesive based on a composition of vinyl silane copolymer and containing CaCO3 is classified as (C09J 143/04, C08K 3/26). If this composition contains also a polyamide, then the classification will be (C09J 143/04, C08L 77/00, C08K 3/26).

Example 4: An adhesive based on a composition based on a first vinyl silane copolymer (<u>C09J 143/04</u>) and containing a second vinyl silane copolymer, a phenol and silica is classified as (<u>C09J 143/04</u>, <u>C08L 43/04</u>, <u>C08K 5/13</u>, <u>C08K 3/36</u>) and in <u>C08L 2205/025</u>.

Example 5: An adhesive based on a composition containing a polyamide in majority, a polyester and a vinyl silane copolymer is classified as (<u>C09J 177/00</u>, <u>C08L 67/00</u>, <u>C08L 43/04</u>) and in <u>C08L 2205/03</u>.

Example 6: Adhesives of compositions containing two polymers of the same dot group, for example compositions of two vinyl silane copolymers, are characterised by the orthogonal indexing code <u>C08L 2205/025</u>. The complete classification for such a composition therefore would be (<u>C09J 143/04</u>, <u>C08L 43/04</u>) and <u>C08L 2205/025</u>. The same applies for compositions of two polymers only distinguished by physical properties (e.g. molecular weight, density etc.)

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# **Glossary of terms**

In this place, the following terms or expressions are used with the meaning indicated:

Attention is drawn to the glossary of C09J 123/00.

# **Synonyms and Keywords**

*In patent documents, the following abbreviations are often used:* Attention is drawn to the table after the title of C09J.

# C09J 145/00

Adhesives based on homopolymers or copolymers of compounds having no unsaturated aliphatic radicals in a side chain, and having one or more carbon-to-carbon double bonds in a carbocyclic or in a heterocyclic system; Adhesives based on derivatives of such polymers (based on polymers of cyclic esters of polyfunctional acids <u>C09J 131/00</u>; based on polymers of cyclic anhydrides or imides <u>C09J 135/00</u>)

### **Definition statement**

#### This place covers:

Adhesive compositions based on homopolymers or copolymers of compounds corresponding to groups <u>C08F 32/00</u>, <u>C08F 132/00</u>, <u>C08F 232/00</u> or <u>C08F 244/00</u>.

Adhesive compositions based on (co)polymers of cyclic olefins, e.g. norbornene or bicyclopentadiene, where the cyclic monomer is the major component in the copolymer.

### References

#### **Limiting references**

This place does not cover:

Adhesives based on polymers of cyclic esters of polyfunctional acids	<u>C09J 131/00</u>
Adhesives based on polymers of cyclic anhydrides or imides	<u>C09J 135/00</u>

### Informative references

Attention is drawn to the following places, which may be of interest for search:

Adhesives based on copolymers of monomers terminated by a heterocyclic ring containing Oxygen	<u>C09J 137/00</u>
Adhesives based on copolymers of monomers terminated by a heterocyclic ring containing Nitrogen	<u>C09J 139/00</u>
Applications or uses of polymer compositions in films	<u>C08J</u>
Polymer compositions	<u>C08L 45/00</u>
Coatings	<u>C09D 145/00</u>

# **Special rules of classification**

Last place priority rule:

Within each subgroup of this group, in the absence of an indication to the contrary, classification is made in the last appropriate place.

Classification guidance:

- Documents are preferably classified according to the examples in the documents, not according to general claims, e.g. if the examples only describe adhesives based on polynorbornene, but subject matter of the claim is an adhesive of polyolefin, the document is classified under adhesives of polynorbornene (C09J 145/00).
- For Copolymers:

Copolymers get the class of the major component, except if there is a lower class which specifies the comonomer in minority (see also last place rule), i.e. ethylene copolymers (ethylene comonomer in majority) would be classified in  $\underline{C09J 123/0807}$ , and not in  $\underline{C09J 145/00}$ , but ethylene norbornene copolymers (norbornene in majority) would be classified in  $\underline{C09J 123/0807}$ .

#### C-Sets classification:

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

- If <u>C09J 145/00</u> relates to a composition and two or more polymers are present, classification is given in the form of C-Sets (i.e. #C9J(c)) according to the relative weight percentage of the polymer constituents.
- The polymer in majority is given a symbol as a base symbol, and the polymers in minority are given symbols as subsequent symbols in the form of C-Sets.
- In addition, a single symbol is given according to the macromolecular constituent present in the highest proportion.
- If all the constituents are present in equal weight percentage, the composition is classified according to each of these constituents.
- In the case that several polymers can be in majority, separate C-Sets should be made based on each polymer in majority and its component(s) in minority.
- Orthogonal indexing codes C08L 2201/00 C08L 2555/86 are also given if applicable.

Example 1: An adhesive of a blend of 60 parts poly-norbornene (<u>C09J 145/00</u>) and 40 parts polyamide (<u>C09J 177/00</u>) is classified as (<u>C09J 145/00</u>, <u>C08L 77/00</u>).

Example 2: An adhesive of a blend of 50 parts poly norbornene (C09J 145/00) and 50 parts polyamide (C09J 177/00) is classified as (C09J 145/00, C08L 77/00) and (C09J 177/00, C08L 45/00).

Example 3: An adhesive based on a composition of polynorbornene and containing CaCO3 is classified as (C09J 145/00, C08K 3/26). If this composition contains also a polyamide, then the classification will be (C09J 145/00, C08L 77/00, C08K 3/26).

Example 4: An adhesive based on a composition based on a first polynorbornene (<u>C09J 145/00</u>) and containing a second polynorbornene, a phenol and silica is classified as (<u>C09J 145/00</u>, <u>C08L 45/00</u>, <u>C08K 5/13</u>, <u>C08K 3/36</u>) and in <u>C08L 2205/02</u>.

Example 5: An adhesive based on a composition containing a polyamide in majority, a polyester and a polynorbornene is classified as (<u>C09J 177/00</u>, <u>C08L 67/00</u>, <u>C08L 45/00</u>) and in <u>C08L 2205/03</u>.

Example 6: Adhesives of compositions containing two polymers of the same dot group, for example compositions of two polynorbornenes, are characterised by the orthogonal indexing code <u>C08L 2205/025</u>. The complete classification for such a composition therefore would be (<u>C09J 145/00</u>, <u>C08L 45/00</u>) and <u>C08L 2205/025</u>. The same applies for compositions of two polymers only distinguished by physical properties, e.g. molecular weight or density.

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# **Glossary of terms**

In this place, the following terms or expressions are used with the meaning indicated:

Attention is drawn to the table of the glossary of C09J 123/00.

# Synonyms and Keywords

*In patent documents the following abbreviations are often used:* Attention is drawn to the table after the title of C09J.

# C09J 147/00

Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, at least one having two or more carbon-to-carbon double bonds; Adhesives based on derivatives of such polymers (<u>C09J 145/00</u> takes precedence; based on conjugated diene rubbers <u>C09J 109/00</u> - <u>C09J 121/00</u>)

### **Definition statement**

This place covers:

Adhesive compositions of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, at least one having two or more carbon-to-carbon double bonds, i.e. unconjugated dienes.

Adhesive compositions of derivatives of such polymers.

# References

#### **Limiting references**

This place does not cover:

Adhesive compositions of conjugated diene polymers	<u>C09J 109/00</u> - <u>C09J 121/00</u>
Adhesive compositions of coumarone-indene polymers	<u>C09J 145/00</u>

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Adhesive compositions of copolymers of ethene-propene or ethene- propene-diene, e.g. adhesive compositions of EPM or EPDM rubber	<u>C09J 123/16</u>
Adhesive compositions of copolymers of isobutene with minor part of conjugated dienes monomers (butyl rubber)	<u>C09J 123/22</u>

# **Special rules of classification**

Classification guidance:

- Adhesive compositions containing a single polymer and an inorganic or non-macromolecular organic additive as compounding agent are not classified in <u>C08K</u>, but in the <u>C09J</u> subclass together with the corresponding symbol in <u>C08K</u> in the form of C-Sets (i.e. #C9Je).
- Inorganic or non-macromolecular organic materials as compounding agents are classified in <u>C08K</u>; if an adhesive composition contains two polymers and an additive following <u>C08K</u>, classification is made in <u>C09J</u> and a symbol from <u>C08K</u> will be given.

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# Synonyms and Keywords

ABS	Acrylonitrile butadiene styrene
BR	Butadiene rubber
CR	Chloroprene rubber
EPDM	Ethene propene diene rubber
EPM	Ethene propene rubber
lir	Butyl rubber
IR	Isoprene rubber
NBR	Acrylonitrile butadiene rubber
NR	Natural rubber
SAN	Styrene acrylonitrile copolymer
SBR	Styrene butadiene rubber

In patent documents, the following abbreviations are often used:

# C09J 149/00

Adhesives based on homopolymers or copolymers of compounds having one or more carbon-to-carbon triple bonds; Adhesives based on derivatives of such polymers

# **Definition statement**

This place covers:

Adhesive compositions based on homopolymers or copolymers of compounds corresponding to groups <u>C08F 38/00</u>, <u>C08F 138/00</u> and <u>C08F 238/00</u>.

### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Applications or uses of polymer compositions in films	<u>C08J</u>
Polymer compositions	<u>C08L 49/00</u>
Artificial filaments or fibres	<u>D01F</u>
Textile treating compositions	<u>D06</u>
Coatings of electrical wires	<u>H01B</u>
Encapsulation of solar cells	H01L 31/048

# **Special rules of classification**

Last place priority rule:

Within each subgroup of this group, in the absence of an indication to the contrary, classification is made in the last appropriate place.

Classification guidance:

- Documents are preferably classified according to the examples in the documents, not according to general claims, e.g. if the examples only describe adhesive compositions based on polyacetylene, but subject matter of the claim is an adhesive composition of polyolefin, the document is classified under adhesive compositions of polyacetylene (<u>C09J 149/00</u>).
- For Copolymers:

In an adhesive comprising a copolymer, the copolymer is given the symbol on the basis of the major component, except if there is a lower group which specifies the comonomer in minority (see also last place rule), e.g. ethylene copolymers (ethylene comonomer in majority) would be classified in <u>C09J 123/0807</u>, and not in <u>C09J 149/00</u>, but ethylene acetylene (acetylene in majority) would be classified in <u>C09J 149/00</u>, not in <u>C09J 123/08</u>.

#### C-Sets classification:

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

- If <u>C09J 149/00</u> relates to a composition and two or more polymers are present, classification is given in the form of C-Sets (i.e. #C9J(c)) according to the relative weight percentage of the polymer constituents.
- The polymer in majority is given a symbol as a base symbol, and the polymers in minority are given symbols as subsequent symbols in the form of C-Sets.

- In addition, a single symbol is given according to the macromolecular constituent present in the highest proportion.
- If all the constituents are present in equal weight percentage, the composition is classified according to each of these constituents.
- In the case that several polymers can be in majority, separate C-Sets should be made based on each polymer in majority and its component(s) in minority.
- Orthogonal indexing codes <u>C08L 2201/00</u> <u>C08L 2555/86</u> are also given if applicable.

Example 1: An adhesive composition of a blend of 60 parts polyacetylene (C09J 149/00) and 40 parts polyamide (C09J 177/00) is classified as (C09J 149/00, C08L 77/00).

Example 2: An adhesive composition of a blend of 50 parts poly acetylene (<u>C09J 149/00</u>) and 50 parts polyamide (<u>C09J 177/00</u>) is classified as (<u>C09J 149/00</u>, <u>C08L 77/00</u>) and (<u>C09J 177/00</u>, <u>C08L 49/00</u>).

Example 3: An adhesive composition based on a composition of polyacetylene and containing CaCO3 is classified as (C09J 149/00, C08K 3/26). If this composition contains also a polyamide, then the classification will be (C09J 149/00) C08L 77/00, C08K 3/26).

Example 4: An adhesive composition based on a composition based on a first polyacetylene (<u>C09J 149/00</u>) and containing a second polyacetylene, a phenol and silica is classified as (<u>C09J 149/00</u>, <u>C08L 49/00</u>, <u>C08K 5/13</u>, <u>C08K 3/36</u>) and in <u>C08L 2205/02</u>.

Example 5: An adhesive composition on a composition containing a polyamide in majority, a polyester and a polyacetylene is classified as (<u>C09J 177/00</u>, <u>C08L 67/00</u>, <u>C08L 49/00</u>) and <u>C08L 2205/03</u>.

Example 6: An adhesive composition containing two polymers of the same dot group, for example compositions of two polyacetylenes, are characterised by the orthogonal indexing code <u>C08L 2205/025</u>. The complete classification for such a composition therefore would be (<u>C09J 149/00</u>, <u>C08L 49/00</u>) and <u>C08L 2205/025</u>. The same applies for compositions of two polymers only distinguished by physical properties (e.g. molecular weight, density etc.)

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# **Glossary of terms**

In this place, the following terms or expressions are used with the meaning indicated:

Attention is drawn to the glossary of C09J 123/00.

### **Synonyms and Keywords**

*In patent documents the following abbreviations are often used:* Attention is drawn to the table after the title of <u>C09J</u>.

# C09J 151/00

Adhesives based on graft polymers in which the grafted component is obtained by reactions only involving carbon-to-carbon unsaturated bonds (based on ABS polymers <u>C09J 155/02</u>); Adhesives based on derivatives of such polymers

# **Definition statement**

This place covers:

Adhesive compositions comprising graft polymers of <u>C08F 251/00-C08F 292/00</u>.

# **Relationships with other classification places**

Graft copolymers in which the grafted component is obtained by reactions involving C=C per se are classified in C08F 251/00-C08F 292/00.

Compositions (other than coating or adhesive) comprising a grafted polymer in majority and other polymer(s) are classified in <u>C08L 51/00-C08L 51/10</u>.

Adhesive compositions comprising graft polymers in which the graft polymer is in minority are classified in <u>C08L 51/00-C08L 51/10</u>.

### References

#### **Limiting references**

This place does not cover:

Adhesive compositions comprising ABS polymers	<u>C09J 155/02</u>
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#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Adhesive compositions comprising an unsaturated monomer and a polymer, e.g. grafting in situ	<u>C09J 4/06</u>
Adhesives in the form of films or foils	<u>C09J 7/00</u> - <u>C09J 7/50</u>
Adhesive compositions comprising an unsaturated monomer and a polymer of C08L 59/00 - C08L 87/00	<u>C09J 159/00</u> - <u>C09J 187/00</u>
Adhesive compositions comprising block or graft copolymers containing polysiloxane sequences (not obtained by reaction of C=C monomer(s) onto polysiloxane)	<u>C09J 183/10</u>
Adhesive compositions comprising graft polymers obtained by interreacting polymers in the absence of monomers, i.e. graft polymer of C08G $81/00$ - C08G $81/028$	<u>C09J 187/005</u>
Presence of graft polymer	<u>C09J 2451/00</u> - <u>C09J 2451/006</u>

# **Special rules of classification**

Classification guidance:

For adhesive compositions comprising grafted rubbers, several symbols are given if the rubber is specific.

If the rubber is EPR: <u>C09J 151/04</u> and <u>C09J 151/06</u>

If the rubber is EPDM, SBR or acrylate rubber: C09J 151/04 and C09J 151/003

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 153/00

Adhesives based on block copolymers containing at least one sequence of a polymer obtained by reactions only involving carbon-to-carbon unsaturated bonds; Adhesives based on derivatives of such polymers

# **Definition statement**

This place covers:

Adhesive compositions of block polymers of classes C08F 293/00-C08F 297/08.

#### **Relationships with other classification places**

Block polymers obtained by reactions only involving C=C per se are classified in <u>C08F 293/00</u>-<u>C08F 297/08</u>.

Compositions (other than coating or adhesive) comprising block polymer in majority and other polymer(s), are classified in <u>C08L 53/00-C08L 53/025</u>.

#### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Adhesives in the form of films or foils	<u>C09J 7/00, C09J 7/50</u>
Adhesive compositions comprising block or graft copolymers containing polysiloxane sequences (not obtained by reaction of C=C monomer(s) onto polysiloxane)	<u>C09J 183/10</u>
Adhesive compositions comprising block polymers obtained by interreacting polymers in the absence of monomers (Block polymer of C08G 81/00 - $C08G 81/028$ )	<u>C09J 187/005</u>
Presence of block polymer	<u>C09J 2453/00</u> – <u>C09J 2453/006</u>

### **Special rules of classification**

Classification guidance:

• Further subdivisions:

<u>C09J 153/005</u> and <u>C09J 153/025</u> cover adhesive compositions comprising modified block polymers. In particular, adhesive compositions comprising hydrogenated styrene-diene block copolymers are classified in <u>C09J 153/025</u>.

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 155/00

# Adhesives based on homopolymers or copolymers, obtained by polymerisation reactions only involving carbon-to-carbon unsaturated bonds, not provided for in groups <u>C09J 123/00</u> - <u>C09J 153/00</u>

# References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Adhesives in the form of films or foil	<u>C09J 7/00</u> - <u>C09J 7/50</u>
Presence of ABS polymer	<u>C09J 2455/00</u> - <u>C09J 2455/006</u>
Polymerisation by the diene synthesis	<u>C08F 2/60</u>
ABS polymers per se	<u>C08F 279/04</u>
Macromolecular compounds obtained by polymerising monomers on to polymers modified by introduction of aliphatic unsaturated end or side groups	<u>C08F 290/00</u> - <u>C08F 290/14</u>
Polymeric compositions comprising homopolymers or copolymers, obtained by polymerisation reactions only involving carbon-to-carbon unsaturated bonds, not provided for in groups <u>C08L 23/00</u> - <u>C08L 53/00</u>	<u>C08L 55/00</u> - <u>C08L 55/04</u>

# **Special rules of classification**

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

### C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 157/00

# Adhesives based on unspecified polymers obtained by reactions only involving carbon-to-carbon unsaturated bonds

# **Definition statement**

#### This place covers:

Adhesives based on polymers obtained by reactions only involving carbon-to-carbon unsaturated bonds which are not limited to a particular polymer type as defined in groups C09J 107/00-C09J 155/00.

Adhesive compositions of polymers obtained by reactions only involving carbon-to-carbon unsaturated bonds which are not specific enough as to fit in the preceding groups <u>C09J 107/00-C09J 155/00</u>.

# **Relationships with other classification places**

Use of <u>C09J 157/00-C09J 157/12</u> symbols should be avoided by classifying the specific examples, whenever practicable, in the corresponding classes of <u>C09J 107/00-C09J 155/00</u>.

# **Special rules of classification**

Classification guidance:

Classification should be made based on the examples, but not the general claims in the documents. The use of main group symbols should be avoided if there are subgroups which cover the subject matter to be classified. The classification should be made in the most indented subgroup that covers the subject matter.

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 157/08

### containing halogen atoms

### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Adhesives based on (co)polymers of compounds having one or more	<u>C09J 127/00</u>
unsaturated aliphatic radicals, each having only one carbon-to-carbon	
double bond, and at least one being terminated by a halogen	

# C09J 157/10

#### containing oxygen atoms

### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Polysaccharides	<u>C09J 101/00</u> - <u>C09J 105/00</u>
Unsaturated alcohols, ethers, ketones, acetals or ketals	<u>C09J 129/00</u>
Saturated carboxylic acid, carbonic acid or haloformic acid esters of unsaturated alcohols	<u>C09J 131/00</u>
Unsaturated carboxylic acids, esters	<u>C09J 133/00</u>
Unsaturated dicarboxylic acids, esters, anhydrides	<u>C09J 135/00</u>
Unsaturated aliphatic radicals, terminated by a heterocyclic ring containing oxygen	<u>C09J 137/00</u>

# C09J 157/12

# containing nitrogen atoms

# References

### Informative references

Attention is drawn to the following places, which may be of interest for search:

Polymers of unsaturated nitriles amides or imides	<u>C09J 133/00</u>
Unsaturated dicarboxylic amides, imides, nitriles	<u>C09J 135/00</u>
Unsaturated aliphatic radicals, terminated by a heterocyclic ring containing nitrogen	<u>C09J 139/00</u>

# C09J 159/00

# Adhesives based on polyacetals; Adhesives based on derivatives of polyacetals

# **Definition statement**

This place covers:

Adhesives based on polyacetals, which are addition polymers of aldehydes or cyclic oligomers thereof or of ketones and correspond to groups C08G 2/00 - C08G 16/00 and their subgroups.

# References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Adhesives based on polyvinyl acetals C09J 129/04
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# **Special rules of classification**

Classification guidance:

When a document specifies an adhesive based on polyacetal in general, or both homopolyacetals and copolyacetals, classification is done in the main group  $\underline{C09J 159/00}$ ; only when the document specifically mentions homopolyacetals or copolyacetals, then classification in  $\underline{C09J 159/02}$  and  $\underline{C09J 159/04}$  is given.

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 161/00

Adhesives based on condensation polymers of aldehydes or ketones (with polyalcohols <u>C09J 159/00</u>; with polynitriles <u>C09J 177/00</u>); Adhesives based on derivatives of such polymers

# **Definition statement**

This place covers:

- · Adhesives based on condensation polymers of
- aldehydes or ketones with polyalcohols which correspond to subgroups C08G 4/00,
- aldehydes or ketones only which correspond to subgroups C08G 6/00,
- aldehydes or ketones with phenols only which correspond to subgroups C08G 8/00,
- · aldehydes or ketones with aromatic hydrocarbons or halogenated
- aromatic hydrocarbons only which correspond to subgroups C08G 10/00,
- aldehydes or ketones with only compounds containing hydrogen attached to nitrogen which correspond to subgroups <u>C08G 12/00</u>.
- aldehydes or ketones corresponding to <u>C08G 14/00</u> <u>C08G 16/06</u>.

# References

# Limiting references

This place does not cover:

Adhesives based on condensation polymers of aldehydes or ketones with polyalcohols	<u>C09J 159/00</u>
Adhesives based on condensation polymers of aldehydes or ketones with polynitriles	<u>C09J 177/00</u>

### Informative references

Attention is drawn to the following places, which may be of interest for search:

Peptides	<u>C07K</u>
Compounding ingredients	<u>C08K</u>

# **Special rules of classification**

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.
# C09J 163/00

# Adhesives based on epoxy resins; Adhesives based on derivatives of epoxy resins

#### **Definition statement**

This place covers:

Adhesive compositions based on polycondensates having more than one epoxy group per molecule, with or without other components.

## **Relationships with other classification places**

C08L 63/00 relates to compositions based on epoxy resins.

C09D 163/00 relates to coating compositions based on epoxy resins.

#### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Adhesives in the form of films or foils	<u>C09J 7/00</u>
Adhesives in the form of films or foils, characterised by the carrier	<u>C09J 7/22</u>
Adhesives in the form of films or foils, characterised by the carrier, based on macromolecular compounds obtained otherwise than by reactions involving only carbon-to-carbon unsaturated bonds	<u>C09J 7/25</u>

# **Special rules of classification**

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

- If <u>C09J 163/00</u> relates to a composition and two or more polymers are present, classification is given in the form of C-Sets (i.e. #C9J(c)) according to the relative weight percentage of the polymer constituents.
- The polymer in majority is given a symbol as a base symbol, and the polymers in minority are given symbols as subsequent symbols in the form of C-Sets.
- In addition, a single symbol is given according to the macromolecular constituent present in the highest proportion.
- If all the constituents are present in equal weight percentage, the composition is classified according to each of these constituents.
- In the case that several polymers can be in majority, separate C-Sets should be made based on each polymer in majority and its component(s) in minority.
- Orthogonal indexing codes C08L 2201/00 C08L 2555/86 are also given if applicable.

Example 1: An adhesive composition comprising a blend of 60 parts non-specified epoxy resin (<u>C09J 163/00</u>) and 40 parts polyamide (<u>C09J 177/00</u>) is classified as (<u>C09J 163/00</u>, <u>C08L 77/00</u>).

Example 2: An adhesive composition comprising a blend of 50 parts non-specified epoxy resin (<u>C09J 163/00</u>) and 50 parts Novolak epoxy resin (<u>C09J 163/04</u>) is classified as (<u>C09J 163/00</u>, <u>C08L 63/04</u>), (<u>C09J 163/04</u>, <u>C08L 63/00</u>) and in <u>C08L 2205/02</u>.

Example 3: An adhesive composition based of a polyepoxide and containing CaCO3 is classified as (<u>C09J 163/00</u>, <u>C08K 3/26</u>). If this composition contains also a polyamide, then the classification will be (<u>C09J 163/00</u>, <u>C08L 77/00</u>, <u>C08K 3/26</u>).

#### C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

#### **Glossary of terms**

In this place, the following terms or expressions are used with the meaning indicated:

Adhesive compositions	Bonding compositions

#### Synonyms and Keywords

Bisphenol A	4,4'-(Propane-2,2-diyl)diphenol
Bisphenol F	2-[(2-Hydroxyphenyl)methyl]phenol
Bisphenol S	4-(4-Hydroxyphenyl)sulfonylphenol
DGEBA	Diglycidyl ether of bisphenol A

# C09J 163/04

#### **Epoxynovolacs**

#### **Definition statement**

This place covers:

Adhesive compositions comprising aromatic epoxy resins, which are multifunctional (three functions or more per molecule), from the condensation of phenol-formaldehyde resins and epichlorhydrin.

#### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Epoxy resins containing three or more epoxy groups per molecule	<u>C08G 59/32</u> -
	<u>C08G 59/38</u>

#### **Synonyms and Keywords**

Novolak	Novolac

# C09J 163/06

#### Triglycidylisocyanurates

#### **Definition statement**

This place covers:

Adhesive compositions comprising cyclic heteroaromatic resin with three glycidyl groups: from the reaction of cyanuric acid with excess epichlorhydrin.

# References

## Informative references

Attention is drawn to the following places, which may be of interest for search:

Epoxy compounds containing three or more epoxy groups, heterocyclic compounds	<u>C08G 59/3236</u>
Compositions of triglycidylisocyanurates	C08L 63/06

# Synonyms and Keywords



# C09J 163/08

# **Epoxidised polymerised polyenes**

### **Definition statement**

This place covers:

Adhesive compositions comprising macromolecular unsaturated compounds, which are epoxidised in a further step (e.g. oxidation by  $H_2O_2$ ), such as fatty acid-based polymers or epoxidised rubbers

# References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Epoxy resins obtained by epoxydation of unsaturated precursor	<u>C08G 59/027</u>
Compositions of epoxidised polymersied polyenes	<u>C08L 63/08</u>

# C09J 163/10

### Epoxy resins modified by unsaturated compounds

# **Definition statement**

This place covers:

Adhesive compositions comprising epoxy resins chemically modified by the reaction of unsaturated compounds

# References

## Informative references

Attention is drawn to the following places, which may be of interest for search:

Epoxy-functional Polycondensates modified by chemical after treatment	<u>C08G 59/14</u>
Epoxy-functional Polycondensates modified by chemical after treatment, with unsaturated monoacids	<u>C08G 59/1461</u>
Epoxy-functional Polycondensates modified by chemical after-treatment, with acrylic or methacrylic acids	<u>C08G 59/1466</u>
Epoxy-functional Polycondensates modified by chemical after treatment, with fatty acids	<u>C08G 59/1472</u>

# C09J 165/00

Adhesives based on macromolecular compounds obtained by reactions forming a carbon-to-carbon link in the main chain (<u>C09J 107/00</u> - <u>C09J 157/00</u>, <u>C09J 161/00</u> take precedence); Adhesives based on derivatives of such polymers

# **Definition statement**

#### This place covers:

Adhesives and adhesive processes (but see below for adhesive processes) based on macromolecular compounds obtained by reactions forming a carbon-carbon bond in the main chain other than polymers obtained by reactions only involving the polyaddition of carbon-to-carbon unsaturated bonds (wherein in the latter case the reactive carbon-carbon group stays intact without cleavage of fragments). The macromolecular compounds are themselves classified in <u>C08G 61/00-C08G 61/127</u>.

# **Relationships with other classification places**

Relationship with other subclasses of classes CO8 and CO9:

Macromolecular compounds per se obtained by polyaddition reactions only involving carbon-tocarbon unsaturated bonds wherein the reactive carbon-carbon group stays intact without cleavage of fragments are classified in <u>C08F</u>. Compositions based on monomers of such polymers are also classified in <u>C08F</u>.

This main group includes metathesis polymerization products, but it does not include common addition polymers such as polymethylmethacrylate.

Macromolecular compounds obtained by reactions forming a carbon-carbon bond in the main chain other than polymers obtained by reactions only involving the polyaddition of carbon-to-carbon unsaturated bonds are classified in  $\underline{C08G\ 61/00}$ . Compositions based on monomers of such polymers are also placed in  $\underline{C08G\ 61/00}$ .

Coating compositions and other polymer compositions for similar uses, e.g. paints, inks, woodstains and printing pastes, are classified in <u>C09D</u>.

Relationship with other main groups of the same subclass C09J:

Adhesives based on polymers prepared by condensation reactions of aldehydes or ketones with phenols only are classified in groups  $\underline{\text{C09J 161/04}} - \underline{\text{C09J 161/16}}$ , since  $\underline{\text{C09J 161/00}} - \underline{\text{C09J 161/00}} - \underline{\text{C09J 161/00}} + \underline{\text{C09$ 

For the same reasons, adhesives based on condensation polymers of aldehydes or ketones only are classified in <u>C09J 161/02</u>. Adhesives of polymers, which may otherwise be formed by carbon-carbon bond formation, but which are prepared by condensation reactions other than those involving the formation of carbon-carbon bonds in the main chain are classified in the appropriate groups, e.g. <u>C09J 179/04</u> for adhesives based on polypyrrole formed from amines and polyketones. Polyketone-based adhesives are classified in <u>C09J 173/00</u>.

### References

#### **Limiting references**

This place does not cover:

Adhesives based on rubbers or on their derivatives	<u>C09J 107/00</u> - <u>C09J 157/00</u>
Adhesives based on condensation polymers of aldehydes or ketones	<u>C09J 161/00</u>

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Adhesive bandages, dressings or absorbent pads	<u>A61L 15/16</u>
Surgical adhesives	<u>A61L 24/00</u>
Catalysts in general	<u>B01J</u>
Layered products characterised by the connection of layers, using an adhesive	<u>B32B 7/12- B32B 7/14</u>
Layered products essentially comprising synthetic resin	<u>B32B 27/00</u> - <u>B32B 27/42</u>
Containers, packaging elements or packages for web or tape-like material, e.g. dispenser for dispensing tape	<u>B65D 85/67</u>
Condensation polymers of aldehydes with phenols only; compositions comprising such polycondensates	<u>C08G 8/04, C08L 61/06,</u> <u>C09J 161/06</u>
Condensation polymers of aldehydes with aromatic hydrocarbons or halogenated aromatic hydrocarbons only; (adhesive) compositions comprising such polycondensates	C08G 10/02, C08L 61/18, C09J 161/18
Macromolecular compounds obtained by reactions forming a carbon-to- carbon link in the main chain of the macromolecule	<u>C08G 61/00</u> - C08G 61/127
Poly(ether ketones) obtained by reactions forming an ether link in the main chain of the macromolecule; (adhesive) compositions comprising such polycondensates	<u>C08G 65/4012,</u> C08L 71/00, C09J 171/00
Polycondensates having nitrogen-containing heterocyclic rings in the main chain of the macromolecules obtained by reactions forming a linkage containing nitrogen, including polypyrroles; compositions comprising such polycondensates	<u>C08G 73/06, C08L 79/04,</u> <u>C09J 179/04</u>
Complementary aspects concerning C08G 61/00	<u>C08G 2261/00</u> - C08G 2261/964
Bonding of a preformed macromolecular material to the same or other solid material such as metal, glass, leather, e.g. using adhesives	<u>C08J 5/12</u>
Connecting constructional elements or machine parts by sticking or pressing them together, e.g. cold pressure welding ; Compositions and coating compositions based on polymers according to main group C08G 61/00 are classified in main groups	F16B 11/00, C08L 65/00, C09D 165/00

Connecting constructional elements or machine parts by sticking or	F16B 11/00
pressing them together, e.g. cold pressure welding	

# Special rules of classification

#### C-Sets classification:

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# **Glossary of terms**

In this place, the following terms or expressions are used with the meaning indicated:

Addition polymers	An addition polymer is a polymer which is formed by an addition reaction (polyaddition), where monomers bond together via rearrangement of bonds without the loss of any atom or molecule. This is in contrast to a condensation polymer which is formed by a condensation reaction where a molecule, such as water, is lost during the formation.
Condensation polymers	Condensation polymers are macromolecules formed by means of reactions in which water or some other simple molecule is eliminated from 2 or more monomer molecules as they combine to form the polymer (polycondensation).

# **Synonyms and Keywords**

In patent documents, the following abbreviations are often used:

ADMET	Acyclic diene metathesis
ROMP	Ring-opening metathesis polymerisation

# C09J 167/00

Adhesives based on polyesters obtained by reactions forming a carboxylic ester link in the main chain (based on polyester-amides C09J 177/12; based on polyester-imides C09J 179/08); Adhesives based on derivatives of such polymers

# **Definition statement**

This place covers:

Adhesive compositions wherein the major component is a polymer of <u>C08G 63/00</u>.

# References

### **Limiting references**

This place does not cover:

Adhesives based on polyester-amides	<u>C09J 177/12</u>
Adhesives based on polyester-imides	<u>C09J 179/08</u>

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Adhesive processes in general	<u>C09J 5/00</u>
Adhesives in the form of films or foils	<u>C09J 7/00</u>
Chemical aspects of and materials for bandages, dressings, absorbent pads or surgical articles	<u>A61L</u>
Layered products comprising polyesters	<u>B32B 27/36</u>
Bonding of preformed macromolecular material	<u>C08J 5/12</u>
Polymer compositions of polyesters	<u>C08L 67/00</u>
Coating compositions of polyesters	<u>C09D 167/00</u>

# **Special rules of classification**

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# **Glossary of terms**

In this place, the following terms or expressions are used with the meaning indicated:

PBT	Polybutylene terephthalate
PCL	Polycaprolactone
PEA	Polyethylene adipate
PEN	Polyethylene naphthalate
PET	Polyethylene terephthalate
PGA	Polyglycolic acid
РНА	Polyhydroxyalkanoate
PLA	Polylactic acid
PTT	Polytrimethylene terephthalate

# C09J 169/00

# Adhesives based on polycarbonates; Adhesives based on derivatives of polycarbonates

# **Definition statement**

This place covers:

Adhesive compositions wherein the major component is a polymer of C08G 64/00

# References

## Informative references

Attention is drawn to the following places, which may be of interest for search:

Adhesive processes in general	<u>C09J 5/00</u>
Adhesives in the form of films or foils	<u>C09J 7/00</u>
Layered products comprising polycarbonates	<u>B32B 27/36</u>
Bonding of preformed macromolecular material	<u>C08J 5/12</u>
Polymer compositions of polycarbonates	<u>C08L 69/00</u>
Coating compositions of polycarbonates	<u>C09D 169/00</u>
Polycarbonate record carriers	G11B 2007/25304

# **Special rules of classification**

#### C-Sets classification:

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 171/00

Adhesives based on polyethers obtained by reactions forming an ether link in the main chain (based on polyacetals C09J 159/00; based on epoxy resins C09J 163/00; based on polythioether-ethers C09J 181/02; based on polyethersulfones C09J 181/06); Adhesives based on derivatives of such polymers

# References

#### Limiting references

This place does not cover:

Adhesives based on polyacetals	<u>C09J 159/00</u>
Adhesives based on epoxy resins	<u>C09J 163/00</u>
Adhesives based on polythioether-ethers	<u>C09J 181/02</u>

Adhesives based on polyethersulfones	<u>C09J 181/06</u>

# **Special rules of classification**

Same rules apply as for <u>C08L 71/00</u> - <u>C08L 71/14</u>.

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 173/00

Adhesives based on macromolecular compounds obtained by reactions forming a linkage containing oxygen or oxygen and carbon in the main chain, not provided for in groups <u>C09J 159/00</u> - <u>C09J 171/00</u>; Adhesives based on derivatives of such polymers

# **Special rules of classification**

The same rules as for CO8L 73/00 - CO8L 73/02 apply.

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 175/00

# Adhesives based on polyureas or polyurethanes; Adhesives based on derivatives of such polymers

# **Definition statement**

*This place covers:* Adhesive compositions of polymers of <u>C08G 18/00</u> or <u>C08G 71/00</u>.

# References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Adhesives processes	<u>C09J 5/00</u>
Preparations for medical, dental or toilet purposes	<u>A61K</u>

Processes for applying liquid materials to surfaces	<u>B05D 1/00</u>
Shaping or joining plastics	<u>B29C</u>
Mould release agents	<u>B29C 33/60</u>
Layered products comprising polyurethanes	<u>B32B 27/40</u>
Working up of polyurethanes to porous or cellular articles	<u>C08J 9/00</u>
Use of inorganic or non-macromolecular organic substances as compounding ingredients	<u>C08K</u>
Polymer compositions wherein the major component is a polymer of C08G 18/00 or C08G 71/00	<u>C08L 75/00</u>
Coating compositions characterized by their physical nature or their effects produced	<u>C09D 5/00</u>
Coating compositions of polyurethanes or polyureas	<u>C09D 175/00</u>
Materials for sealing	<u>C09K 3/10</u>

# **Special rules of classification**

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# **Synonyms and Keywords**

In patent documents, the following abbreviations are often used:

СРР	Copolymer polyol
DABCO	1,4-Diazabicyclo(2.2.2)octane
DMPA	Dimethylol propionic acid
EDA	Ethylene diamine
EO	Ethylen oxide
HDI	Hexane diisocyanate
H12MDI	Dicyclohexylmethane diisocyanate
IEM	Isocyanato ethyl methacrylate
IPDI	Isophorone diisocyanate
Jeffamine	Amine capped polyether
MDI	4,4-Methylenebis(phenyl)isocyanate
PEG	Polyethyleneglycol
PIR	Polyisocyanurate
PMDI	Polymethylene poly(phenylisocyanate)
PO	Propylene oxide
PPG	Polypropylene glycol

PTMO	Polytetramethylene oxide
TDI	Toluene diisocyanate
TMP	Trimethylol propane
TMXDI	Trimethylol propane
TPU	Tetramethylxylylene diisocyanate
XDI	Xylylene diisocyanate

# C09J 177/00

Adhesives based on polyamides obtained by reactions forming a carboxylic amide link in the main chain (based on polyhydrazides <u>C09J 179/06</u>; based on polyamide-imides <u>C09J 179/08</u>); Adhesives based on derivatives of such polymers

# **Definition statement**

#### This place covers:

Adhesives based on compositions of polyamides derived from

- omega-amino carboxylic acids or from lactams which correspond to subgroup <u>C08G 69/02</u>, e.g. nylon 6
- alpha-amino carboxylic which correspond to subgroups C08G 69/10

polyamines and polycarboxylic acids which correspond to subgroup C08G 69/26, e.g. nylon 66.

- aromatically bound amino and carboxyl groups of amino-carboxylic acids or of polyamines and polycarboxylic acids which correspond to subgroup <u>C08G 69/32</u>
- adhesives based on compositions of polyester-amides which correspond to subgroup C08G 69/44

# References

#### Limiting references

This place does not cover:

Adhesives based on polyhydrazides	<u>C09J 179/06</u>
Adhesives based on polyamideimides or polyamide acids	<u>C09J 179/08</u>

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Hollow fibres membranes	<u>B01D 69/08</u>
Treatment of rubber	<u>C08C</u>
Macromolecular compounds obtained by reactions involving carbon to carbon bonds	<u>C08F</u>
Processes of polymerisation	<u>C08F 2/00</u>
Post-polymerisation treatments	<u>C08F 6/00</u>
Macromolecular compounds obtained otherwise than by reactions only involving carbon to carbon bonds	<u>C08G</u>
Processes of treating or compounding macromolecular substances	<u>C08J 3/00</u>
Processes of crosslinking	<u>C08J 3/24</u>

Manufacture of articles or shaped materials containing macromolecular substances, e.g. films	<u>C08J 5/00, C08J 5/18</u>
Coating of shaped articles made of macromolecular substances	<u>C08J 7/00</u>
Workingup of macromolecular substances to porous or cellular materials	<u>C08J 9/00</u>
Compounding ingredients	<u>C08K</u>
Tubes	<u>F16L</u>
Optical articles, optical parts, e.g. contact lenses	<u>G02B 1/00</u>
Photosensitive films	<u>G03F 3/00</u>
Printed circuits	<u>H05K</u>

# **Special rules of classification**

#### C-Sets classification:

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of C09J 101/00.

#### C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 179/00

Adhesives based on macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing nitrogen, with or without oxygen, or carbon only, not provided for in groups C09J 161/00 - C09J 177/00

# **Definition statement**

This place covers:

Adhesives compositions of:

- Polyamines or polyethyleneimines.
- Polycondensates having nitrogen-containing heterocyclic rings in the main chain, e.g. polyhydrazides, polyhydrazides, polytriazoles, polyamino-triazoles, polybenzimidazoles or polyoxadiazoles.
- Polyimides, polyester-imides, polyamide-imides, polyamide acids, (unsaturated) polyimide precursors.

# References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Hollow fibres membranes	<u>B01D 69/08</u>
Treatment of rubber	<u>C08C</u>
Macromolecular compounds obtained by reactions involving carbon to carbon bonds	<u>C08F</u>
Processes of polymerisation	<u>C08F 2/00</u>

Informative references

Post-polymerisation treatments	C08F 6/00
Macromolecular compounds obtained otherwise than by reactions only involving carbon to carbon bonds	<u>C08G</u>
Processes of treating or compounding macromolecular substances	<u>C08J 3/00</u>
Processes of crosslinking	<u>C08J 3/24</u>
Manufacture of articles or shaped materials containing macromolecular substances, e.g. films	<u>C08J 5/00, C08J 5/18</u>
Coating of shaped articles made of macromolecular substances	<u>C08J 7/00</u>
Working-up of macromolecular substances to porous or cellular materials	<u>C08J 9/00</u>
Compounding ingredients	<u>C08K</u>
Tubes	<u>F16L</u>
Optical articles, optical parts, e.g. contact lenses	<u>G02B 1/00</u>
Photosensitive films	<u>G03F 3/00</u>
Printed circuits	<u>H05K</u>

# **Special rules of classification**

#### C-Sets classification:

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

### C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 181/00

Adhesives based on macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing sulfur, with or without nitrogen, oxygen, or carbon only; Adhesives based on polysulfones; Adhesives based on derivatives of such polymers

# **Special rules of classification**

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 183/00

Adhesives based on macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing silicon, with or without sulfur, nitrogen, oxygen, or carbon only; Adhesives based on derivatives of such polymers

# **Definition statement**

This place covers:

Adhesive compositions comprising macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing silicon with or without sulfur, nitrogen, oxygen or carbon only (Si-based macromolecular compounds in accordance with <u>C08G 77/00</u> or "Si-based polymers" hereunder), for example:

- polysilicates (corresponding to group C08G 77/02),
- polysiloxanes (corresponding to group C08G 77/04),
- block- or graft-copolymers containing polysiloxane sequences (corresponding to group <u>C08G 77/42</u>) or
- polymers in which at least two but not all the silicon atoms are connected by linkages other than oxygen atoms (corresponding to group <u>C08G 77/48</u>).

Adhesive compositions of derivatives of such polymers.

Adhesive compositions made from mixtures of different reactive silanes (sol-gel compositions) are classified in the respective subclass of  $\underline{C09J 183/00}$ . It is assumed that in such mixtures there has always been formed a siloxane polymer via hydrolysis/condensation.

# **Relationships with other classification places**

The groups for adhesive compositions are structured in analogy to the coating compositions <u>C09D 183/00</u>.

# **Special rules of classification**

#### **C-Sets classification:**

In this group, multiple C-Sets, specifically C-Sets #C9Jc, #C9Jf, #C9Jc(Si), #C9Jc(Si)2, #C9Jf(Si) and #C9Jf(Si)2 are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of classification of the following places

- See C-Sets #C9Jc, #C9Jf, #C9Jc(Si) and #C9Jf(Si) in C09J 101/00.
- See C-sets #C9Jc(Si)2 and #C9Jf(Si)2 present in this group below.

#### C-Sets statement: #C9Jc(Si)2, #C9Jf(Si)2

#C9Jc(Si)2, and #C9Jf(Si)2 are a special use of #C9Dc and #C9Df, are applied for a composition comprising two or more Si-based polymers in accordance with <u>C08G 77/00</u>.

- In groups <u>C09J 183/02</u> <u>C09J 183/16</u>, the feature relating to an adhesive composition comprising one Si-based polymer in majority with one Si-based polymer in minority optionally with non Sibased polymer is classified in the form of C-Sets.
- In #C9Jc(Si)2, the base symbol, representing the polymer in majority, is taken from the groups <u>C09J 183/02</u> - <u>C09J 183/16</u>, whereas the subsequent symbol(s) representing the silicon-based macromolecular compound(s) in minority is (are) taken from the group <u>C08L 83/00</u> and optionally from the groups <u>C08L 1/00</u> - <u>C08L 101/16</u> for any other polymer.
- In #C9Jf(Si)2, the base symbol, representing the polymer in majority, is taken from the groups <u>C09J 183/02</u> - <u>C09J 183/16</u>, whereas the subsequent symbol(s) representing the silicon- based macromolecular compound(s) in minority is (are) taken from the group <u>C08L 83/00</u> and optionally from the groups <u>C08L 1/00</u> - <u>C08L 101/16</u> for any other polymer and further subsequent

symbols representing compound(s) used as an additive(s), is (are) taken from the groups C08K 3/00 - C08K 13/08.

- In addition to C-Sets, one or more additional symbols are allocated, which are selected from the range <u>C08G 77/02</u> - <u>C08G 77/62</u> corresponding to each of the Si-based macromolecular compound components detailed in the C-Set.
- A single symbol is given according to the macromolecular constituent present in the highest proportion.

#### C-Sets syntax rules:

- C-Sets of #C9Jc(Si)2 shall contain at least two symbols.
- C-Sets of #C9Jf(Si)2 shall contain at least three symbols.
- While duplicate symbols are allowed in these C-Sets, only one symbol selected from the range <u>C09J 183/02</u> <u>C09J 183/16</u> is permitted per C-Set.
- The order of <u>C09J</u> and <u>C08L</u> symbols in C-Sets of #C9Dc(Si)2 is relevant as it reflects the relative amounts of the polymers.
- In #C9Jf(Si)2, the <u>C08K</u> symbols for the additives always appear after the symbols for the polymers (<u>C09J</u> or <u>C08L</u>). The order of <u>C08K</u> symbols of additives is not relevant if there is more than one additive in the composition.

#### **C-Sets examples:**

• #C9Jc

Example 1: An adhesive composition comprising, in descending amounts by weight, an epoxy-substituted polysiloxane in accordance with C08G 77/14 and a polyester in accordance with C08G 63/02 is classified as (C09J 183/06, C08L 67/02) and in C08G 77/14 (ADD).

Example 2: An adhesive composition comprising, in descending amounts by weight, a polyester in accordance with C08G 63/02 and an alkoxy-substituted polysiloxane in accordance with C08G 77/18 is classified as (C09J 167/02, C08L 83/04) and in C08G 77/18 (ADD).

#C9Jc(Si)

Example 3: An adhesive composition comprising, in descending amounts by weight, a polyester in accordance with <u>C08G 63/02</u>, an amine-substituted polysiloxane in accordance with <u>C08G 77/26</u> and an epoxy-substituted polysiloxane in accordance with <u>C08G 77/14</u> is classified as (<u>C09J 167/02</u>, <u>C08L 83/08</u>, <u>C08L 83/00</u>) and in <u>C08G 77/14</u> and <u>C08G 77/26</u>.

Example 4: An adhesive composition comprising, in descending amounts by weight, a vinyl-substituted polysiloxane in accordance with <u>C08G 77/20</u> and a polysiloxane bearing Si-H groups in accordance with <u>C08G 77/12</u> is classified as (<u>C09J 183/04</u>, <u>C08L 83/00</u>) and in <u>C08G 77/12</u> (ADD) and <u>C08G 77/20</u> (ADD).

Example 5: An adhesive composition comprising, in descending amounts by weight, a vinylsubstituted polysiloxane in accordance with <u>C08G 77/20</u>, an epoxy-substituted polysiloxane in accordance with <u>C08G 77/14</u> and a polysiloxane bearing Si-H groups in accordance with <u>C08G 77/12</u> is classified as (<u>C09J 183/04</u>, <u>C08L 83/00</u>, <u>C08L 83/00</u>) and in <u>C08G 77/12</u> (ADD), <u>C08G 77/14</u> (ADD) and <u>C08G 77/20</u> (ADD).

Example 6: An adhesive composition comprising, in descending amounts by weight, a silanol-substituted polysiloxane in accordance with <u>C08G 77/16</u>, a polysiloxane bearing Si-H groups in accordance with <u>C08G 77/12</u> and a polyester in accordance with <u>C08G 63/02</u> is classified as (<u>C09J 183/04</u>, <u>C08L 83/00</u>, <u>C08L 67/02</u>) and in <u>C08G 77/12</u> (ADD) and <u>C08G 77/16</u> (ADD).

Example 7: An adhesive composition comprising, in descending amounts by weight, a halogen groupbearing polysiloxane in accordance with <u>C08G 77/24</u>, a polyester in accordance with <u>C08G 63/02</u> and an epoxy-substituted polysiloxane in accordance with <u>C08G 77/14</u> is classified as (<u>C09J 183/08</u>, <u>C08L 67/02</u>, <u>C08L 83/00</u>) and in <u>C08G 77/14</u> (ADD) and <u>C08G 77/24</u> (ADD).

<sup>• #</sup>C9Jc(Si)2

• #C9Jf

Example 8: An adhesive composition comprising, in descending amounts by weight, an epoxysubstituted polysiloxane in accordance with <u>C08G 77/14</u> and a polyester in accordance with <u>C08G 63/02</u> and a resorcinol phosphate is classified as (<u>C09J 183/06</u>, <u>C08L 67/02</u>, <u>C08K 5/523</u>) and in <u>C08G 77/14</u> (ADD).

Example 9: An adhesive composition comprising, in descending amounts by weight, a polyester in accordance with C08G 63/02 and an alkoxy-substituted polysiloxane in accordance with C08G 77/18 and silica is classified as (C09J 167/02, C08L 83/04, C08K 3/36) and in C08G 77/18 (ADD).

• #C9Jf(Si)

Example 10: An adhesive composition comprising, in descending amounts by weight, a polyester in accordance with <u>C08G 63/02</u>, an amine-substituted polysiloxane in accordance with <u>C08G 77/26</u> and an epoxy-substituted polysiloxane in accordance with <u>C08G 77/14</u> and carbon black is classified as (<u>C09J 167/02</u>, <u>C08L 83/08</u>, <u>C08L 83/00</u>, <u>C08K 3/04</u>) and in <u>C08G 77/14</u> (ADD) and <u>C08G 77/26</u> (ADD).

• #C9Jf(Si)2

Example 11: An adhesive composition comprising, in descending amounts by weight, a vinyl-substituted polysiloxane in accordance with <u>C08G 77/20</u> and a polysiloxane bearing Si-H groups in accordance with <u>C08G 77/12</u> and silica is classified as (<u>C09J 183/04</u>, <u>C08L 83/00</u>, <u>C08K 3/36</u>) and in <u>C08G 77/12</u> (ADD) and <u>C08G 77/20</u> (ADD).

Example 12: An adhesive composition comprising, in descending amounts by weight, a vinyl-substituted polysiloxane in accordance with <u>C08G 77/20</u>, an epoxy-substituted polysiloxane in accordance with <u>C08G 77/14</u> and a polysiloxane bearing Si-H groups in accordance with <u>C08G 77/12</u> and silica is classified as (<u>C09J 183/04</u>, <u>C08L 83/00</u>, <u>C08L 83/00</u>, <u>C08K 3/36</u>) and in <u>C08G 77/12</u> (ADD), <u>C08G 77/14</u> (ADD) and <u>C08G 77/20</u> (ADD).

Example 13: An adhesive composition comprising, in descending amounts by weight, a silanolsubstituted polysiloxane in accordance with <u>C08G 77/16</u>, a polysiloxane bearing Si-H groups in accordance with <u>C08G 77/12</u> and a polyester in accordance with <u>C08G 63/02</u> and a phenol is classified as (<u>C09J 183/04</u>, <u>C08L 83/00</u>, <u>C08L 67/02</u>, <u>C08K 5/13</u>) and in <u>C08G 77/12</u> (ADD) and <u>C08G 77/16</u> (ADD).

Example 14: An adhesive composition comprising, in descending amounts by weight, a halogen group-bearing polysiloxane in accordance with <u>C08G 77/24</u>, a polyester in accordance with <u>C08G 63/02</u> and an epoxy-substituted polysiloxane in accordance with <u>C08G 77/14</u> and a phenol is classified as (<u>C09J 183/08</u>, <u>C08L 67/02</u>, <u>C08L 83/00</u>, <u>C08K 5/13</u>) and in <u>C08G 77/14</u> (ADD) and <u>C08G 77/24</u> (ADD).

#### C-Sets searches:

Since multiple C-Sets classifications are applicable to this group C-Sets search queries may be made according to C-Sets classification rules described in  $\underline{C09J \ 101/00}$  and this group above, as well as other related subclasses, e.g.  $\underline{C08K}$  and  $\underline{C08L}$ .

In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 183/04

## Polysiloxanes

### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Application of siloxanes as pressure sensitive adhesives (PSAs)	<u>C09J 7/38</u>
Release adhesive composition on which the PSA is applied	C09J 7/40, C09D 183/04

# **Special rules of classification**

From 01.09.2010 onwards, an adhesive composition containing two or more siloxanes is searched and classified in (<u>C09J 183/04</u>, <u>C08L 83/04</u>), and then given additional Indexing Codes for the respective siloxanes, e.g. <u>C08G 77/12</u> for Si-H siloxane and <u>C08G 77/20</u> for vinyl-siloxane.

# C09J 183/10

Block or graft copolymers containing polysiloxane sequences (obtained by polymerising a compound having a carbon-to-carbon double bond on to a polysiloxane <u>C09J 151/08</u>, <u>C09J 153/00</u>)

# References

#### **Limiting references**

This place does not cover:

Adhesive compositions obtained by polymerising a compound having a	<u>C09J 151/08,</u>
carbon-to-carbon double bond on to a polysiloxane	<u>C09J 153/00</u>

# **Special rules of classification**

Attention is drawn to the CPC Definitions of C08G 77/42.

# C09J 183/12

containing polyether sequences

#### **Special rules of classification**

Attention is drawn to the CPC Definitions of the respective C08G 77/00 classes.

# C09J 183/14

in which at least two but not all the silicon atoms are connected by linkages other than oxygen atoms (<u>C09J 183/10</u> takes precedence)

#### **Special rules of classification**

Attention is drawn to the CPC Definitions of the respective C08G 77/00 classes.

<u>C09J 183/10</u> takes precedence over this group.

# C09J 185/00

Adhesives based on macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing atoms other than silicon, sulfur, nitrogen, oxygen, and carbon; Adhesives based on derivatives of such polymers

## **Definition statement**

#### This place covers:

Adhesive compositions based on macromolecular compounds corresponding to groups <u>C08G 79/00</u>, e.g. containing AI or Sn.

## **Special rules of classification**

The same rules as for <u>C08L 85/00-C08L 85/04</u> apply.

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 187/00

## Adhesives based on unspecified macromolecular compounds, obtained otherwise than by polymerisation reactions only involving unsaturated carbonto-carbon bonds

#### **Definition statement**

#### This place covers:

Adhesive compositions of unspecific macromolecular compounds, obtained by step polymerisation reactions or addition polymerization reactions.

#### **Special rules of classification**

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 189/00

## Adhesives based on proteins; Adhesives based on derivatives thereof

## **Definition statement**

This place covers:

Adhesives based on proteins or derivatives thereof corresponding to the following groups: COBH 1/OO - COBH 1/OO.

#### **Relationships with other classification places**

Covalently or ionically crosslinked gels are classified in <u>C08H</u>.

A composition based on proteins or derivatives thereof is classified in CO8L.

Coating compositions based on proteins or derivatives thereof are classified in <u>C09D</u>.

## References

#### Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Foodstuff preparations A23J 3/00	
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#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Composition comprising proteins or protein derivatives	<u>C08L 89/00</u> - <u>C08L 89/06</u>
Coating composition comprising proteins or protein derivatives	<u>C09D 189/00</u> - <u>C09D 189/06</u>

# **Special rules of classification**

Last place priority rule:

Within each subgroup of this group, in the absence of an indication to the contrary, classification is made in the last appropriate place.

Classification guidance:

- Reference <u>A23J 3/00</u> is non-limiting in the subclass/main group/subgroup <u>C08L 89/00</u>. CPC will be updated/corrected once this inconsistency is resolved in IPC.
- The subject-matter disclosed in both the claims and the examples of a patent document is to be classified.

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

- If <u>C09J 189/00</u> relates to an adhesive composition of proteins or derivatives, classification is given in the form of C-Sets (i.e. #C9J(c)) according to the relative weight percentage of the polymer constituents.
- The polymer in majority is given a symbol as a base symbol, and the polymers in minority are given symbols as subsequent symbols in the form of C-Sets.

- In addition, a single symbol is given according to the macromolecular constituent present in the highest proportion.
- If all the constituents are present in equal weight percentage, the composition is classified according to each of these constituents.
- In the case that several polymers can be in majority, separate C-Sets should be made based on each polymer in majority and its component(s) in minority.
- Orthogonal indexing codes <u>C08L 2201/00</u> <u>C08L 2555/86</u> are also given if applicable.

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 191/00

# Adhesives based on oils, fats or waxes; Adhesives based on derivatives thereof

## **Definition statement**

This place covers:

Adhesive compositions based on drying oils, vulcanised oils, e.g. factice, linoxyn or (mineral) waxes.

## **Relationships with other classification places**

Covalently or ionically crosslinked gels are classified in <u>C08H</u>.

A composition based on oils, fats, waxes or derivatives thereof is classified in CO8L.

Coating compositions based on oils, fats, waxes or derivatives thereof are classified in <u>C09D</u>.

The use of oils, fats and waxes in cosmetics and other toilet preparations is further classified in one of <u>A61Q</u> together with <u>A61K 8/92</u>.

Galenical compositions comprising natural resins are classified in A61K 9/00.

The use of oils, fats and waxes as carriers in medicinal preparations is classified in A61K 47/44.

The use of oils, fats and waxes in lubricants is classified in C10M.

# References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Vulcanised oils, e.g. factice	<u>C08H 3/00</u>
Composition comprising oils, fats or waxes	<u>C08L 91/00</u> - <u>C08L 91/08</u>
Coating composition comprising oils, fats or waxes	<u>C09D 191/00</u> - <u>C09D 191/08</u>
Polishing compositions, ski waxes	<u>C09G</u>
Soaps, detergent compositions	<u>C11D</u>

# **Special rules of classification**

Last place priority rule:

Within each subgroup of this group, in the absence of an indication to the contrary, classification is made in the last appropriate place.

Classification guidance:

- The subject-matter disclosed in both the claims and the examples of a patent document is to be classified.
- Oils, fats and waxes in solution, or together with other macromolecular compounds, or together with an inorganic or non-macromolecular organic additive are considered as a composition and are thus classified according to the rules of <u>C08L</u>.

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

- If <u>C09J 191/00</u> relates to an adhesive composition containing oils, fats and waxes, classification is given in the form of C-Sets according to the relative weight percentage of the polymer constituents.
- The polymer in majority is given a symbol as a base symbol, and the polymers in minority are given symbols as subsequent symbols in the form of C-Sets.
- In addition, a single symbol is given according to the macromolecular constituent present in the highest proportion.
- If all the constituents are present in equal weight percentage, the composition is classified according to each of these constituents.
- In the case that several polymers can be in majority, separate C-Sets should be made based on each polymer in majority and its component(s) in minority.
- Orthogonal indexing codes C08L 2201/00 C08L 2555/86 are also given if applicable.

#### C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 193/00

#### Adhesives based on natural resins; Adhesives based on derivatives thereof

#### **Definition statement**

#### This place covers:

Adhesives or binders based on natural resins or their derivatives corresponding to the following groups: <u>C09F 1/00</u>

#### **Relationships with other classification places**

Covalently or ionically crosslinked gels are classified in <u>C08H</u>.

A composition based on natural resins or their derivatives is classified in <u>C08L</u>.

Coating compositions based on natural resins or their derivatives are classified in CO9D.

Grafted natural resins obtained by reaction of an unsaturated monomer onto a natural resin are classified in <u>C08F 253/00</u>.

Galenical compositions comprising natural resins are classified in <u>A61K 9/00</u>.

# References

## Informative references

Attention is drawn to the following places, which may be of interest for search:

Composition comprising natural resins	<u>C08L 93/00</u> - <u>C08L 93/04</u>
Coating composition comprising natural resins	<u>C09D 193/00</u> - <u>C09D 193/04</u>
Purification or chemical modification of natural resins	<u>C09F 1/00</u>
Polishing compositions	<u>C09G</u>

# **Special rules of classification**

Last place priority rule:

Within each subgroup of this group, in the absence of an indication to the contrary, classification is made in the last appropriate place.

Classification guidance:

- The subject-matter disclosed in both the claims and the examples of a patent document is to be classified.
- Adhesive compositions based on natural resins in solution, or together with other macromolecular compounds, or together with an inorganic or non-macromolecular organic additive are considered as a composition and are thus classified according to the rules of <u>C09J</u>.

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

- If <u>C09J 193/00</u> relates to an adhesive composition containing natural resins, classification is given in the form of C-Sets according to the relative weight percentage of the polymer constituents.
- The polymer in majority is given a symbol as a base symbol, and the polymers in minority are given symbols as subsequent symbols in the form of C-Sets.
- In addition, a single symbol is given according to the macromolecular constituent present in the highest proportion.
- If all the constituents are present in equal weight percentage, the composition is classified according to each of these constituents.
- In the case that several polymers can be in majority, separate C-Sets should be made based on each polymer in majority and its component(s) in minority.
- Orthogonal indexing codes <u>C08L 2201/00</u> <u>C08L 2555/86</u> are also given if applicable.

#### C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 195/00

# Adhesives based on bituminous materials, e.g. asphalt, tar, pitch

# **Definition statement**

This place covers:

• Compositions of bitumen or asphalt used for adhesive applications other than adhering aggregate.

• Aqueous compositions of bitumen or asphalt, e.g. emulsions, used for adhesive applications other than adhering aggregate.

# **Relationships with other classification places**

Relationship with other subclasses of <u>C08</u> and <u>C09</u>:

Attention is drawn to the general rules of classification of C08L and C09J subclasses.

Relationship with the main group CO8L 95/00:

Since the main group <u>C09J 195/00</u> is seen as a "related field" of <u>C08L 95/00</u>, explicit reference is made to all references, definitions, terms and rules explained in said main group <u>C08L 95/00</u>.

# References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Coating or adhering of aggregate	<u>C08L 95/00</u> - C08L 95/005
Coating applications	<u>C09D 195/00</u> - <u>C09D 195/005</u>
Sealing materials	<u>C09K 3/00, C09K 3/12, C09K 3/18</u>

# **Special rules of classification**

Classification guidance:

- The subgroup <u>C09J 195/00</u> or <u>C09J 195/005</u> should be used only if the claims of the application explicitly encompass a bituminous adhesive as such.
- In addition a <u>C08L 95/00</u> code in combination with the relevant orthogonal indexing code(s) (<u>C08L 2555/00</u> - <u>C08L 2555/86</u>) characterising essential features should also be given if the adhesive composition is mainly characterised by the bituminous composition, either by its constituents and/or by its parameters.
- Example 1: An adhesive composition for adhering 2 metal substrates to each other comprising bitumen is classified in <u>C09J 195/00</u>.
- Example 2: An adhesive composition for adhering aggregate comprising bitumen is classified in <u>C08L 95/00</u>.
- Example 3: An adhesive composition comprising bitumen for mere coating a substrate is classified in <u>C09J 195/00</u>.
- Example 4: An adhesive composition comprising a mixture of bitumen and bees wax is classified in <u>C09J 195/00</u> and <u>C08L 95/00</u> and <u>C08L 2555/64</u>.

#### C-Sets classification:

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# **Glossary of terms**

In this place, the following terms or expressions are used with the meaning indicated:

In this group, several terms (or expressions) are used having the meaning as indicated in the group  $\underline{\text{C08L 95/00}}$ 

## Synonyms and Keywords

In this group, several synonyms and keywords are used as indicated in the group C08L 95/00

# C09J 197/00

# Adhesives based on lignin-containing materials (based on polysaccharides <u>C09J 101/00</u> - <u>C09J 105/00</u>)

# **Definition statement**

This place covers:

Adhesives based on lignin-containing materials corresponding to the following groups: COBH 6/OO and COBH 8/OO

## **Relationships with other classification places**

Covalently or ionically crosslinked gels are classified in CO8H.

## References

#### **Limiting references**

This place does not cover:

Adhesives based on polysaccharides	<u>C09J 101/00</u> -
	<u>C09J 105/00</u>

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Adhesive or binder based on natural macromolecular compounds or of derivatives thereof not provided for in groups <u>C08L 89/00</u> - <u>C08L 97/00</u> , e.g. flours	<u>C09J 199/00</u>
Macromolecular compounds derived from lignin	<u>C08H 6/00</u>
Macromolecular compounds derived from lignocellulosic materials	<u>C08H 8/00</u>
Composition comprising lignin-containing materials	<u>C08L 97/00</u> - <u>C08L 97/02</u>
Coating composition comprising lignin-containing materials	<u>C09D 197/00</u> - C09D 197/02

# **Special rules of classification**

Last place priority rule:

Within each subgroup of this group, in the absence of an indication to the contrary, classification is made in the last appropriate place.

Classification guidance:

• The subject-matter disclosed in both the claims and the examples of a patent document is to be classified.

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

- If <u>C09J 197/00</u> relates to a Lignin-containing adhesive composition, classification is given in the form of C-Sets (i.e. #C9J(c)) according to the relative weight percentage of the polymer constituents.
- The polymer in majority is given a symbol as a base symbol, and the polymers in minority are given symbols as subsequent symbols in the form of C-Sets.
- In addition, a single symbol is given according to the macromolecular constituent present in the highest proportion.
- If all the constituents are present in equal weight percentage, the composition is classified according to each of these constituents.
- In the case that several polymers can be in majority, separate C-Sets should be made based on each polymer in majority and its component(s) in minority.
- Orthogonal indexing codes C08L 2201/00-C08L 2555/86 are also given if applicable.

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 199/00

Adhesives based on natural macromolecular compounds or on derivatives thereof, not provided for in groups <u>C09J 101/00</u> -<u>C09J 107/00</u> or <u>C09J 189/00</u> - C09J 197/00

#### **Definition statement**

This place covers:

Adhesives based on natural macromolecular compounds or derivatives thereof, corresponding to the following groups: <u>C08H 99/00</u>

#### **Relationships with other classification places**

Covalently or ionically crosslinked gels are classified in <u>C08H</u>.

#### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Adhesive/binder based on starch or derivatives thereof	<u>C09J 103/00</u>
Adhesive/binder based on lignin-containing materials, e.g. lignin, cork, lignocellulose or wood	<u>C09J 197/00</u>
Natural macromolecular compounds or derivatives thereof	<u>C08H 99/00</u>
Composition comprising natural macromolecular compounds	<u>C08L 99/00</u>
Coating compositions comprising natural macromolecular compounds	<u>C09D 199/00</u>

# **Special rules of classification**

Last place priority rule:

Within each subgroup of this group, in the absence of an indication to the contrary, classification is made in the last appropriate place.

Classification guidance:

- The subject-matter disclosed in both the claims and the examples of a patent document is to be classified.
- Adhesive composition of natural macromolecular materials in solution, or together with other macromolecular compounds, or together with an inorganic or non-macromolecular organic additive are considered as a composition and are thus classified according to the rules of <u>C09J</u>.

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

- If <u>C09J 199/00</u> relates to a Lignin-containing adhesive composition, classification is given in the form of C-Sets (i.e. #C9J(c)) according to the relative weight percentage of the polymer constituents.
- The polymer in majority is given a symbol as a base symbol, and the polymers in minority are given symbols as subsequent symbols in the form of C-Sets.
- In addition, a single symbol is given according to the macromolecular constituent present in the highest proportion.
- If all the constituents are present in equal weight percentage, the composition is classified according to each of these constituents.
- In the case that several polymers can be in majority, separate C-Sets should be made based on each polymer in majority and its component(s) in minority.
- Orthogonal indexing codes C08L 2201/00 C08L 2555/86 are also given if applicable.

#### **C-Sets searches:**

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# C09J 201/00

#### Adhesives based on unspecified macromolecular compounds

#### **Definition statement**

This place covers:

Adhesive compositions based on unspecified macromolecular compounds.

#### **Special rules of classification**

#### **C-Sets classification:**

In this group, C-Sets (#C9Jc, #C9Je, #C9Jf, #C9Jc(Si) and #C9Jf(Si)) are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Special rules of <u>C09J 101/00</u>.

#### C-Sets searches:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses. In addition, #C8Lz, #C9Dz, and #C9Jz Search Rules may be followed to search for polymers in documents classified prior to April 2012.

# **Glossary of terms**

In this place, the following terms or expressions are used with the meaning indicated:

In this group, several terms (or expressions) are used having the meaning as indicated in the group  $\underline{C08L \ 95/00}$ .

# Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms: In this group, several synonyms and keywords are used as indicated in the group <u>C08L 95/00</u>.

# C09J 2203/00

# Applications of adhesives in processes or use of adhesives in the form of films or foils

# **Definition statement**

This place covers:

Additional features of applications of adhesives in processes (C09J 5/00) or uses of adhesives in the form of films or foils (C09J 7/00).

# **Special rules of classification**

A symbol from <u>C09J 5/00</u> or <u>C09J 7/00</u> must be allocated for the indexing codes under <u>C09J 2203/00</u> to be allocated as well.

Example:

An adhesive process used in the fabrication of shoes involving the pre-treatment of a substrate is classified in  $\underline{\text{C09J } 2203/362}$  and in  $\underline{\text{C09J } 5/02}$ .

An adhesive tape with a paper carrier used as masking tape for painting is classified in C09J 7/21 and in C09J 2203/31.

# C09J 2301/00

# Additional features of adhesives in the form of films or foils

# **Definition statement**

*This place covers:* Additional features of adhesives in the form of films or foils (<u>C09J 7/00</u>).

# C09J 2301/312

#### parameters being the characterizing feature

# **Definition statement**

#### This place covers:

Additional features of adhesives in the form of films or foils with parameters being the characterising feature when the adhesive itself is not specified.

# C09J 2301/40

# characterized by the presence of essential components

## **Definition statement**

This place covers:

Additional features of adhesives in the form of films or foils characterised by the presence of essential components.

# C09J 2400/00

#### Presence of inorganic and organic materials

## **Definition statement**

#### This place covers:

Orthogonal indexing codes related to adhesives in the form of films or foils, classified in C09J 7/00 - C09J 7/50 and in adhesive processes in general classified in C09J 5/00 - C09J 5/10.

## **Special rules of classification**

Classification guidance:

The indexing scheme of  $\underline{C09J 2400/00}$  covers the use of materials in adhesive processes in general or adhesives in the form of films or foils and is used as single symbols or in C-Sets (in the case of blends or copolymers) in conjunction with groups  $\underline{C09J 5/00}$  and  $\underline{C09J 7/00}$ .

Use of indexing codes as single symbols:

In groups <u>C09J 2401/00</u> - <u>C09J 2499/008</u>, each indent within a given group points to a particular material, monomer or (co)polymer in a specific layer, e.g.

C09J 2401/00: presence of cellulose in the adhesive layer

- C09J 2401/001: presence of cellulose in the barrier layer
- C09J 2401/003: presence of cellulose in the primer coating
- C09J 2401/005: presence of cellulose in the release coating

<u>C09J 2401/006</u>: presence of cellulose in the substrate

C09J 2401/008: presence of cellulose in the pretreated surface to be joined

Orthogonal indexing codes within C09J 2400/00 - C09J 2499/008 can be allocated as single symbol(s) and/or in C-Sets.

#### Combination sets (C-Sets):

#### C-Sets statement: #C9Jg

- In groups <u>C09J 2400/00</u> <u>C09J 2499/008</u> blends of material or resins used within the same layer
  of adhesives in the form of films or foils are classified in the form of C-Sets.
- In #C9Jg, the base symbol, representing the first material or (co)polymer in a given layer, is taken from groups <u>C09J 2400/00</u> – <u>C09J 2499/008</u>, whereas the subsequent symbol(s), representing the second or further material or (co)polymer in the same layer, is (are) taken from the corresponding groups in <u>C09J 2400/00</u> – <u>C09J 2499/008</u>.

#### C-Sets syntax rules:

• Each C-Set shall contain two or more symbols.

#### C09J 2400/00 (continued)

Special rules of classification

- Duplicate symbols are allowed in these C-Sets.
- In these C-Sets the symbols are arranged in alphanumerical order.

#### **C-Sets examples:**

- #C9Jg: A blend of a poly(meth)acrylate polymer (<u>C09J 2433/00</u>) and a polyolefin resin (<u>C09J 2423/00</u>) in an adhesive layer is classified as (<u>C09J 2423/00</u>, <u>C09J 2433/00</u>).
- #C9Jg: A blend of two distinct poly(meth)acrylate polymers (<u>C09J 2433/00</u>) in an adhesive layer is classified as (<u>C09J 2433/00</u>, <u>C09J 2433/00</u>).
- #C9Jg: A blend of a poly(meth)acrylate (<u>C09J 2433/001</u>) and PVC resin (<u>C09J 2427/001</u>) in a barrier layer is classified as (<u>C09J 2427/001</u>, <u>C09J 2433/001</u>).
- #C9Jg: A blend of a polyamide (<u>C09J 2477/003</u>), polyimide (<u>C09J 2479/083</u>), and a polyester (<u>C09J 2467/003</u>) resin in a primer coating layer is classified as (<u>C09J 2467/003</u>, <u>C09J 2477/003</u>, <u>C09J 2479/083</u>).
- #C9Jg: A blend of a polyethylene (<u>C09J 2423/046</u>) and polypropylene resin (<u>C09J 2423/106</u>) in a substrate layer is classified as (<u>C09J 2423/046</u>, <u>C09J 2423/106</u>).
- #C9Jg: A blend in a pretreated surface to be joined of a polyester (<u>C09J 2467/008</u>) and a polycarbonate resin (<u>C09J 2469/008</u>) is classified as (<u>C09J 2467/008</u>, <u>C09J 2469/008</u>).

#### a.

#### C-Sets statement: #C9Jh

- In groups <u>C09J 2400/00</u> <u>C09J 2499/008</u>, the nature of the monomers in a (co)polymer used within a given layer of adhesives in the form of films or foils is classified in the form of C-Sets.
- In #C9Jh, the base symbol, representing the first monomer in a (co)polymer in a given layer, is taken from groups  $\underline{C09J 2400/00} \underline{C09J 2499/008}$ , whereas the subsequent symbols, representing the second or further monomer in a (co)polymer in the same layer, are taken from the corresponding groups in  $\underline{C09J 2400/00} \underline{C09J 2499/008}$ . In addition, the indexing code  $\underline{C09J 2301/414}$  must be given as a separate symbol.

b.

#### C-Sets syntax rules:

- Each C-Set shall contain two or more symbols.
- Duplicate symbols are allowed in these C-Sets.
- In these C-Sets the symbols are arranged in alphanumerical order.

c.

#### **C-Sets examples:**

- #C9Jh: A copolymer of polyethylene (C09J 2423/04) and polyvinyl alcohol (C09J 2429/00) in an adhesive layer is classified as (C09J 2423/04, C09J 2429/00) and in C09J 2301/414.
- #C9Jh: A copolymer of a tetrafluoroethylene (<u>C09J 2427/005</u>) and ethylene (<u>C09J 2423/045</u>) in a release coating layer is classified as (<u>C09J 2423/045</u>, <u>C09J 2427/005</u>) and in <u>C09J 2301/414</u>.

d.

#### For searches using C-Sets:

C-Sets search queries may be made according to C-Sets classification rules described in <u>C09J</u> and related subclasses.