

C08C

Treatment or chemical modification of rubber

Definition statement

This subclass/group covers:

- processes directed to natural rubber or to conjugated diene rubber
- treatment of diene rubber
- chemical modification of diene rubber

Relationship between large subject matter areas

Homo- or copolymers of dienes are classified in [C08F 36/00](#), [C08F 136/00](#), [C08F 236/00](#).

References relevant to classification in this subclass

This subclass/group does not cover:

Graft polymers	C08F 279/00
Preparation of living diene homo- or copolymers using anionic catalysts	C08F 36/04
Post-polymerisation treatment of addition polymers other than dienes	C08F 6/00 - C08F 6/28
Chemical modification of addition polymers other than dienes	C08F 8/00
Coupling of polymers	C08G 81/02
Compositions of modified rubber	C08L 15/00
Compositions of rubber characterised by functional groups, e.g. telechelic diene polymers	C08L 19/00
Compositions of copolymers of ethene-propene or ethene-propene-diene, e.g. EPM or EPDM rubber	C08L 23/16
Compositions of copolymers of isobutene with minor part of conjugated dienes monomers, e.g.	C08L 23/22

butyl rubber	
Compositions of unconjugated diene polymers	C08L 47/00
Compositions of diene rubbers	C08L 7/00 - C08L 21/00

Special rules of classification within this subclass

The IPC group [C08C 1/16](#) is covered by [C08C 1/14](#).

Glossary of terms

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

Diene rubber	Homopolymer or copolymer of compounds having as the major part one or more unsaturated aliphatic radicals, at least one having two or more carbon-to-carbon double bonds
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Synonyms and Keywords

In patent documents the following abbreviations are often used:

BR	Butadiene rubber
CR	Chloroprene rubber
EPM or EPDM	Ethene-propene or ethene-propene-diene rubber
IIR	Butyl rubber
IR	Isoprene rubber
NBR	Acrylonitrile butadiene rubber
NR	Natural rubber
SBR	Styrene butadiene rubber

C08C 1/00

Treatment of rubber latex

Definition statement

This subclass/group covers:

Chemical or physical treatment of rubber latex before or during concentration, e.g. purifying, deproteinising, preservation of rubber latex or concentrating

Coagulation

Informative references

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

Preserving ingredients	C08K
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C08C 2/00

Treatment of rubber solutions

Definition statement

This subclass/group covers:

Treatment of rubber solutions, e.g. by purification, removal of catalyst residues or wining of rubber from solutions.

C08C 3/00

Treatment of coagulated rubber

Definition statement

This subclass/group covers:

Treatment of coagulated rubber, e.g. by purification

C08C 4/00

Treatment of rubber before vulcanisation, not provided for in groups C08C1/00 to C08C3/02

C08C 19/00

Chemical modification of rubber (crosslinking agents, other than provided for by C08C19/30, C08K)

Definition statement

This subclass/group covers:

Chemical modification of rubber, e.g. hydrogenation, oxidation, depolymerisation, isomerisation, cyclisation, incorporation of halogen, sulphur, nitrogen, phosphorus, silicon or metal atoms into the molecule, reaction with compounds containing carbon-to-carbon unsaturated bonds or addition of a reagent which reacts with a hetero atom or a group containing hetero atoms of the macromolecule.

References relevant to classification in this group

This subclass/group does not cover:

Crosslinking agent, other than provided for by group C08C 19/30	C08K
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Special rules of classification within this group

In [C08C 19/00](#) - [C08C 19/44](#), in the absence of an indication to the contrary a process is classified in the last appropriate place.

C08C 19/44

of polymers containing metal atoms exclusively at one or both ends of the skeleton

Definition statement

This subclass/group covers:

Processes directed to the addition of a reagent which reacts with a hetero atom or a group containing heteroatoms of the macromolecule containing metal atoms exclusively at one or both ends of the skeleton, i.e. chemical reaction at the end of polymerchains prepared by living polymerization.