

40.02 - Synthetic rubber and factice derived from oils, in primary forms or in plates, sheets or strip; mixtures of any product of heading 40.01 with any product of this heading, in primary forms or in plates, sheets or strip.

- Styrene-butadiene rubber (SBR); carboxylated styrene-butadiene rubber (XSBR) :

4002.11 - - Latex

4002.19 - - Other

4002.20 - Butadiene rubber (BR)

- Isobutene-isoprene (butyl) rubber (IIR); halo-isobutene-isoprene rubber (CIIR or BIIR) :

4002.31 - - Isobutene-isoprene (butyl) rubber (IIR)

4002.39 - - Other

- Chloroprene (chlorobutadiene) rubber (CR) :

4002.41 - - Latex

4002.49 - - Other

- Acrylonitrile-butadiene rubber (NBR) :

4002.51 - - Latex

4002.59 - - Other

4002.60 - Isoprene rubber (IR)

4002.70 - Ethylene-propylene-non-conjugated diene rubber (EPDM)

4002.80 - Mixtures of any product of heading 40.01 with any product of this heading

- Other :

4002.91 - - Latex

4002.99 - - Other

This heading covers :

- (1) **Synthetic rubber** as defined in Note 4 to this Chapter (see below). This includes synthetic rubber latex, whether or not pre-vulcanised, and synthetic rubber in other primary forms or in plates, sheets or strip. The heading also covers synthetic rubber which has been treated for the purposes of transport and preservation or with a view to obtaining particular properties designed to facilitate its subsequent use or to improve the qualities of the end product. Such treatment must not, however, alter its essential character as a raw material. In particular it must not contain any substance forbidden by Note 5 (A) to this Chapter.

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Among the products which have been compounded but which are not excluded from this heading by the provisions of Note 5 are the **oil-extended rubbers**; these contain up to approximately 50 % of oil.

- (2) **Factice derived from oils** - Factice is the product of the reaction of certain vegetable or fish oils (whether or not oxidised or partly hydrogenated) with sulphur or sulphur chloride.

Factice is physically weak and is used mainly compounded with natural or synthetic rubber, and also for the manufacture of erasers.

- (3) **Intermixtures** of any of the foregoing products.

- (4) **Mixtures of any product of heading 40.01 with any product of this heading.**

Note 4 (Definition of synthetic rubber)

This Note is in three parts. Whereas substances of Part (a) and (c) must comply with the vulcanisation, elongation and recovery criteria mentioned in Part (a), thioplasts of Part (b) are exempt from these requirements. It should be noted that the definition of **synthetic rubber** applies not only to heading 40.02 but also to Note 1. Consequently, wherever the term **rubber** is used in the Nomenclature, it includes synthetic rubber as defined in Note 4.

The expression “ synthetic rubber ” covers :

- (a) **Unsaturated synthetic substances**, which meet the requirements concerning vulcanisation, elongation and recovery as laid down in Part (a) of the Note. For the purposes of the test, substances necessary for the cross-linking, such as vulcanising activators, accelerators or retarders may be added. The presence of small amounts of breakdown products of emulsifiers (Note 5 (B) (ii)) and very small amounts of the special purpose additives mentioned in Note 5 (B) (iii) is also permitted. However, the presence of any substances not necessary for the cross-linking, such as pigments (other than those added solely for the purpose of identification), plasticisers, extenders, fillers, reinforcing agents, organic solvents is not permitted. Thus, the presence of mineral oil or dioctyl phthalate is not permitted for the purpose of the test.

Accordingly, in the case of substances containing materials not permitted by Note 4, such as mineral oil, the test is to be carried out on a sample which does not contain such materials or from which such materials have been removed. In the case of vulcanised articles, which cannot be tested as such, it is necessary to obtain a sample of the unvulcanised raw material from which the articles are made, in order to perform the test.

Such unsaturated synthetic substances include styrene-butadiene rubbers (SBR), carboxylated styrene-butadiene rubbers (XSBR), butadiene rubbers (BR), isobutene-isoprene (butyl) rubbers (IIR), halo-isobutene-isoprene rubbers (CIIR or BIIR), chloroprene (chlorobutadiene) rubbers (CR), acrylonitrile-butadiene rubbers (NBR), isoprene rubbers (IR), ethylene-propylene-non-conjugated diene rubbers (EPDM), carboxylated acrylonitrile-butadiene rubbers (XNBR) and acrylonitrile-isoprene rubbers (NIR). In order to be classified as synthetic rubber, all these substances must comply with the vulcanisation, elongation and recovery criteria mentioned above.

- (b) **Thioplasts (TM)** which are saturated synthetic substances, obtained by the reaction of aliphatic dihalides with a sodium polysulphide; they are generally vulcanisable with the classical-type vulcanising agents. The mechanical properties of certain types of thioplasts are inferior to those of the other grades of synthetic rubber but they have the advantage of being resistant to solvents. These should not be confused with the polysulphides of **heading 39.11** (see the Explanatory Note to that heading).
- (c) The products listed below, provided that they comply with the conditions described in paragraph (a) above in regard to vulcanisation, elongation and recovery :
- (1) **Modified natural rubber**, obtained by grafting or mixing rubber with plastics.

Such rubber is usually obtained by fixing a polymerisable monomer onto the rubber by using a polymerisation catalyst or by co-precipitation of a natural rubber latex with a synthetic polymer latex.

The main characteristic of modified natural rubber is that it is to a certain extent “self-reinforcing”, its properties in this respect being similar to those of a mixture of natural rubber and carbon black.
 - (2) **De-polymerised natural rubber**, obtained by mechanical processing (pounding) at a given temperature.
 - (3) **Mixtures of unsaturated synthetic substances with saturated synthetic high polymers** (e.g., mixtures of acrylonitrile-butadiene rubber and poly(vinyl chloride)).

This heading **excludes** :

- (a) Elastomers which do not comply with the conditions laid down in Note 4 to this Chapter (generally **Chapter 39**).
- (b) The products of this heading compounded, before or after coagulation, with substances forbidden by Note 5 (A) to this Chapter (**heading 40.05** or **40.06**).