

Chapter 40

Rubber and articles thereof

Notes.

- 1.- Except where the context otherwise requires, throughout the Nomenclature the expression "rubber" means the following products, whether or not vulcanised or hard : natural rubber, balata, gutta-percha, guayule, chicle and similar natural gums, synthetic rubber, factice derived from oils, and such substances reclaimed.
- 2.- This Chapter does not cover :
 - (a) Goods of Section XI (textiles and textile articles);
 - (b) Footwear or parts thereof of Chapter 64;
 - (c) Headgear or parts thereof (including bathing caps) of Chapter 65;
 - (d) Mechanical or electrical appliances or parts thereof of Section XVI (including electrical goods of all kinds), of hard rubber;
 - (e) Articles of Chapter 90, 92, 94 or 96; or
 - (f) Articles of Chapter 95 (other than sports gloves, mittens and mitts and articles of headings 40.11 to 40.13).
- 3.- In headings 40.01 to 40.03 and 40.05, the expression "primary forms" applies only to the following forms :
 - (a) Liquids and pastes (including latex, whether or not pre-vulcanised, and other dispersions and solutions);
 - (b) Blocks of irregular shape, lumps, bales, powders, granules, crumbs and similar bulk forms.
- 4.- In Note 1 to this Chapter and in heading 40.02, the expression "synthetic rubber" applies to :
 - (a) Unsaturated synthetic substances which can be irreversibly transformed by vulcanisation with sulphur into non-thermoplastic substances which, at a temperature between 18 °C and 29 °C, will not break on being extended to three times their original length and will return, after being extended to twice their original length, within a period of five minutes, to a length not greater than one and a half times their original length. For the purposes of this test, substances necessary for the cross-linking, such as vulcanising activators or accelerators, may be added; the presence of substances as provided for by Note 5 (B) (ii) and (iii) is also permitted. However, the presence of any substances not necessary for the cross-linking, such as extenders, plasticisers and fillers, is not permitted;
 - (b) Thioplasts (TM); and
 - (c) Natural rubber modified by grafting or mixing with plastics, depolymerised natural rubber, mixtures of unsaturated synthetic substances with saturated synthetic high polymers provided that all the above-mentioned products comply with the requirements concerning vulcanisation, elongation and recovery in (a) above.
- 5.- (A) Headings 40.01 and 40.02 do not apply to any rubber or mixture of rubbers which has been compounded, before or after coagulation, with :
 - (i) vulcanising agents, accelerators, retarders or activators (other than those added for the preparation of pre-vulcanised rubber latex);

- (ii) pigments or other colouring matter, other than those added solely for the purpose of identification;
 - (iii) plasticisers or extenders (except mineral oil in the case of oil-extended rubber), fillers, reinforcing agents, organic solvents or any other substances, except those permitted under (B);
- (B) The presence of the following substances in any rubber or mixture of rubbers shall not affect its classification in heading 40.01 or 40.02, as the case may be, provided that such rubber or mixture of rubbers retains its essential character as a raw material :
- (i) emulsifiers or anti-tack agents;
 - (ii) small amounts of breakdown products of emulsifiers;
 - (iii) very small amounts of the following : heat-sensitive agents (generally for obtaining thermosensitive rubber latexes), cationic surface-active agents (generally for obtaining electropositive rubber latexes), antioxidants, coagulants, crumbling agents, freeze-resisting agents, peptisers, preservatives, stabilisers, viscosity-control agents, or similar special-purpose additives.
- 6.- For the purposes of heading 40.04, the expression " waste, parings and scrap " means rubber waste, parings and scrap from the manufacture or working of rubber and rubber goods definitely not usable as such because of cutting-up, wear or other reasons.
- 7.- Thread wholly of vulcanised rubber, of which any cross-sectional dimension exceeds 5 mm, is to be classified as strip, rods or profile shapes, of heading 40.08.
- 8.- Heading 40.10 includes conveyor or transmission belts or belting of textile fabric impregnated, coated, covered or laminated with rubber or made from textile yarn or cord impregnated, coated, covered or sheathed with rubber.
- 9.- In headings 40.01, 40.02, 40.03, 40.05 and 40.08, the expressions " plates ", " sheets " and " strip " apply only to plates, sheets and strip and to blocks of regular geometric shape, uncut or simply cut to rectangular (including square) shape, whether or not having the character of articles and whether or not printed or otherwise surface-worked, but not otherwise cut to shape or further worked.
- In heading 40.08 the expressions " rods " and " profile shapes " apply only to such products, whether or not cut to length or surface-worked but not otherwise worked.

GENERAL

Definition of rubber

The expression " rubber " is defined in Note 1 to this Chapter. Where this expression is used without qualification in this and other Chapters of the Nomenclature, it means the following products :

- (1) **Natural rubber, balata, gutta-percha, guayule, chicle and similar** (i.e., rubber-like) **natural gums** (see the Explanatory Note to heading 40.01).

- (2) **Synthetic rubber** as defined in Note 4 to this Chapter. For the purpose of the test required by Note 4, a sample of the unsaturated synthetic substance or a substance of a kind specified in Note 4 (c) (in the condition of unvulcanised raw material) is to be vulcanised with sulphur and then subjected to the elongation and recovery test (see the Explanatory Note to heading 40.02). 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 rubber 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. No test is, however, required for thioplasts which are regarded as synthetic rubber by definition.
- (3) **Factice derived from oils** (see the Explanatory Note to heading 40.02).
- (4) **Reclaimed rubber** (see the Explanatory Note to heading 40.03).

The expression "rubber" covers the foregoing products whether unvulcanised, vulcanised or hard.

The term "vulcanised" refers in general to rubber (including synthetic rubber) which has been cross-linked with sulphur or any other vulcanising agent (such as, sulphur chloride, certain oxides of polyvalent metals, selenium, tellurium, thiuram di- and tetrasulphides, certain organic peroxides and certain synthetic polymers), whether or not using heat or pressure, or by high energy, radiation so that it passes from a mainly plastic state to a mainly elastic one. It should be noted that the criterion concerning vulcanisation with sulphur is relevant only for the purposes of Note 4, i.e., for determining whether a substance is synthetic rubber or not. Once a substance has been determined to be synthetic rubber, products made therefrom are considered as vulcanised rubber products for the purpose of headings 40.07 to 40.17, whether they have been vulcanised with sulphur or with some other vulcanising agent.

For the purpose of vulcanisation, in addition to vulcanising agents, certain other substances are also normally added, such as accelerators, activators, retarders, plasticisers, extenders, fillers, reinforcing agents or any of the additives mentioned in Note 5 (B) to this Chapter. Such vulcanisable mixtures are regarded as compounded rubber and are classified in heading 40.05 or 40.06 depending upon the form in which they are presented.

Hard rubber, (for example, ebonite) is obtained by vulcanising rubber with a high proportion of sulphur to the point where it becomes practically inflexible and inelastic.

Scope of the Chapter

This Chapter covers rubber, as defined above, in the raw or semi-manufactured states, whether or not vulcanised or hard, and articles wholly of rubber or whose essential character derives from rubber, other than products excluded by Note 2 to this Chapter.

The general arrangement of the headings is as follows :

- (a) Subject to Note 5, headings 40.01 and 40.02 essentially cover raw rubber in primary forms or in plates, sheets or strip.

- (b) Headings 40.03 and 40.04 cover reclaimed rubber in primary forms or in plates, sheets or strip, and waste, parings and scrap of rubber (other than hard rubber) and powders and granules obtained therefrom.
- (c) Heading 40.05 covers compounded rubber, unvulcanised, in primary forms or in plates, sheets or strip.
- (d) Heading 40.06 covers other forms and articles of unvulcanised rubber, whether or not compounded.
- (e) Headings 40.07 to 40.16 cover semi-manufactures and articles of vulcanised rubber other than hard rubber.
- (f) Heading 40.17 covers hard rubber, in all forms, including waste and scrap and articles of hard rubber.

Primary forms (headings 40.01 to 40.03 and 40.05)

The expression "primary forms" is defined in Note 3 to this Chapter. It should be noted that pre-vulcanised latex is specifically included in the definition of "primary forms" and is therefore to be regarded as unvulcanised. Since headings 40.01 and 40.02 do not cover rubber or mixtures of rubbers to which an organic solvent has been added (see Note 5), the expression "other dispersions and solutions" in Note 3 applies to heading 40.05 only.

Plates, sheets and strip (headings 40.01, 40.02, 40.03, 40.05 and 40.08)

These expressions are defined in Note 9 to this Chapter and include blocks of regular geometric shape. Plates, sheets and strip may be surface-worked (printed, embossed, grooved, channelled, ribbed, etc.) or simply cut to rectangular (including square) shape, whether or not having the character of articles, but may not be otherwise cut to shape or further worked.

Cellular rubber

Cellular rubber is rubber having many cells (either open, closed, or both), dispersed throughout its mass. It includes sponge or foam rubber, expanded rubber and microporous or microcellular rubber. It may be either flexible or rigid (e.g., ebonite sponge).

Note 5

Note 5 to this Chapter provides criteria to distinguish rubber or mixtures of rubber in primary forms, plates, sheets or strip, which have not been compounded (headings 40.01 and 40.02) from those which have been compounded (heading 40.05). This Note does not make any distinction on the basis of whether compounding has been done before or after coagulation. It, however, permits the presence of certain substances in the rubber or mixtures of rubbers of headings 40.01 and 40.02 provided that the rubber or mixture of rubbers retains its essential character as a raw material. Such substances include mineral oil, emulsifiers or anti-tack agents, small amounts (generally not exceeding 5 %) of breakdown products of emulsifiers and very small amounts (generally less than 2 %) of special purpose additives.

Rubber and textile combinations

The classification of rubber and textile combinations is essentially governed by Note 1 (ij) to Section XI, Note 3 to Chapter 56 and Note 4 to Chapter 59, and as regards conveyor or transmission belts or belting by Note 8 to Chapter 40 and Note 6 (b) to Chapter 59. The following products are covered by this Chapter :

- (a) Felt impregnated, coated, covered or laminated with rubber, containing 50 % or less by weight of textile material, and felt completely embedded in rubber;
- (b) Nonwovens, either completely embedded in rubber or entirely coated or covered on both sides with such material, provided that such coating or covering can be seen with the naked eye with no account being taken of any resulting change of colour;
- (c) Textile fabrics (as defined in Note 1 to Chapter 59) impregnated, coated, covered or laminated with rubber, weighing more than 1,500 g/m² and containing 50 % or less by weight of textile material;
- (d) Plates, sheets or strip of cellular rubber, combined with textile fabrics (as defined in Note 1 to Chapter 59), felt or nonwovens, where the textile is present merely for reinforcing purposes.

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This Chapter **does not cover** articles mentioned in Note 2 to this Chapter. Additional exclusions are referred to in the Explanatory Notes to certain headings of this Chapter.