

## Chapter 70

### **Glass and glassware**

Notes.

1.- This Chapter does not cover :

(a) Goods of heading 32.07 (for example, vitrifiable enamels and glazes, glass frit, other glass in the form of powder, granules or flakes);

(b) Articles of Chapter 71 (for example, imitation jewellery);

(c) Optical fibre cables of heading 85.44, electrical insulators (heading 85.46) or fittings of insulating material of heading 85.47;

(d) Front windscreens (windshields), rear windows and other windows, framed, for vehicles of Chapters 86 to 88;

(e) Front windscreens (windshields), rear windows and other windows, whether or not framed, incorporating heating devices or other electrical or electronic devices, for vehicles of Chapters 86 to 88;

(f) Optical fibres, optically worked optical elements, hypodermic syringes, artificial eyes, thermometers, barometers, hydrometers or other articles of Chapter 90;

(g) Luminaires or lighting fittings, illuminated signs, illuminated name-plates or the like, having a permanently fixed light source, or parts thereof of heading 94.05;

(h) Toys, games, sports requisites, Christmas tree ornaments or other articles of Chapter 95 (excluding glass eyes without mechanisms for dolls or for other articles of Chapter 95); or

(ij) Buttons, fitted vacuum flasks, scent or similar sprays or other articles of Chapter 96.

2.- For the purposes of headings 70.03, 70.04 and 70.05 :

(a) glass is not regarded as “worked” by reason of any process it has undergone before annealing;

(b) cutting to shape does not affect the classification of glass in sheets;

(c) the expression “absorbent, reflecting or non-reflecting layer” means a microscopically thin coating of metal or of a chemical compound (for example, metal oxide) which absorbs, for example, infra-red light or improves the reflecting qualities of the glass while still allowing it to retain a degree of transparency or translucency; or which prevents light from being reflected on the surface of the glass.

3.- The products referred to in heading 70.06 remain classified in that heading whether or not they have the character of articles.

4.- For the purposes of heading 70.19, the expression “glass wool” means :

(a) Mineral wools with a silica ( $\text{SiO}_2$ ) content not less than 60 % by weight;

(b) Mineral wools with a silica ( $\text{SiO}_2$ ) content less than 60 % but with an alkaline oxide ( $\text{K}_2\text{O}$  or  $\text{Na}_2\text{O}$ ) content exceeding 5 % by weight or a boric oxide ( $\text{B}_2\text{O}_3$ ) content exceeding 2 % by weight.

Mineral wools which do not comply with the above specifications fall in heading 68.06.

5.- Throughout the Nomenclature, the expression “glass” includes fused quartz and other fused silica.

Subheading Note.

1.- For the purposes of subheadings 7013.22, 7013.33, 7013.41 and 7013.91, the expression “lead crystal” means only glass having a minimum lead monoxide ( $\text{PbO}$ ) content by weight of 24 %.

## GENERAL

This Chapter covers glass in all forms and articles of glass (other than goods excluded by Note 1 to this Chapter or covered more specifically by other headings of the Nomenclature).

Glass (except fused quartz and other fused silica referred to below) is a fused homogeneous mixture, in varying proportions, of an alkali silicate (of sodium or potassium) with one or more silicates of calcium and lead, and accessorially of barium, aluminium, manganese, magnesium, etc.

There are many varieties of glass according to their composition (e.g., Bohemian glass, crown glass, lead crystal glass, flint glass, strass paste). These various types are non-crystalline (amorphous) and wholly transparent.

The various headings of this Chapter cover the corresponding articles irrespective of the variety of glass of which they consist.

Manufacturing processes vary considerably and include :

(A) Casting (e.g., for plate glass).

(B) Rolling (e.g., for plate glass or wired glass).

(C) Floating (for float glass).

(D) Moulding, whether or not combined with pressing, blowing or drawing (e.g., for the manufacture of bottles, tumblers, certain types of optical glass, ashtrays).

(E) Blowing, mechanical or non-mechanical, with or without moulds (e.g., for the manufacture of bottles, ampoules, ornaments and sometimes for the manufacture of sheet glass).

(F) Drawing or extruding (particularly for sheet glass, rods, tubes and piping, and fibre glass).

(G) Pressing, generally with moulds, frequently used as the manufacturing process for e.g., ashtrays, and also in combination with rolling (e.g., for figured rolled glass) or blowing (e.g., for bottles).

(H) Lampworking, with the aid of a blow lamp (for the manufacture of ampoules, fancy articles, etc., from glass rod or tubing).

(IJ) Cutting out the required articles from blanks, spheres, etc., obtained by any process (articles of fused quartz or other fused silica, in particular, are often obtained from blanks of solid or hollow section).

For multicellular glass, see the Explanatory Note to heading 70.16.

In certain cases the method of manufacturing the articles determines their classification in this Chapter. For example, heading 70.03 applies only to cast or rolled glass, and heading 70.04 only to drawn or blown glass.

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Note 5 to this Chapter provides that the expression “glass” includes fused quartz and other fused silica.

This Chapter also covers :

(1) Milk or opal glasses which are translucent and are obtained by adding materials such as fluorspar or bone ash (in the proportion of about 5 %) to the mass of the glass; the added material gives rise to partial crystallisation in the melt on cooling or reheating.

(2) Special materials known as glass-ceramics, in which the glass is converted into an almost wholly crystalline material by a process of controlled crystallisation. They are made by adding to the glass batch nucleating agents which are often metal oxides (such as titanium dioxide and zirconium oxide) or metals (such as copper powder). After the article has been shaped by ordinary glass-making techniques, it is

maintained at a temperature such as to ensure crystallisation of the glassy body around the nucleating crystals (devitrification). Glass-ceramics may be opaque or sometimes transparent. They have much better mechanical, electrical and heat-resistant properties than ordinary glass.

(3) Glass having a low coefficient of expansion, e.g., borosilicate glass.