69.09 - Ceramic wares for laboratory, chemical or other technical uses; ceramic troughs, tubs and similar receptacles of a kind used in agriculture; ceramic pots, jars and similar articles of a kind used for the conveyance or packing of goods (+)**.**

- Ceramic wares for laboratory, chemical or other technical uses :

6909.11 - - Of porcelain or china

6909.12 - - Articles having a hardness equivalent to 9 or more on the Mohs scale

6909.19 - - Other

6909.90 - Other

This heading covers a range of very varied articles usually made from vitrified ceramics (stoneware, porcelain or china, steatite ceramics, etc.), glazed or unglazed. It **does not**, however, **cover** refractory goods of a kind designed for resisting high temperatures as described in the General Explanatory Note to sub-Chapter I. But articles of a type **not designed for high temperature work remain in this heading** even if made of refractory materials (e.g., thread guides, grinding apparatus, etc., of sintered alumina).

The heading covers in particular :

(1) Laboratory wares (e.g., for research or industrial use) such as crucibles and crucible lids, evaporating dishes, combustion boats, cupels; mortars and pestles; spoons for acids, spatulas; supports for filters and catalysts; filter plates, tubes, candles, cones, funnels, etc.; water-baths; beakers, graduated vessels (**other than** graduated kitchen measures); laboratory dishes, mercury troughs; small tubes (e.g., combustion tubes, including analysis tubes for estimation of carbon, sulphur, etc.).

(2) Ceramic wares for other technical uses, such as pumps, valves; retorts, vats, chemical baths and other static containers with single or double walls (e.g., for electroplating, acid storage); taps for acids; coils, fractionating or distillation coils and columns, Raschig rings for petroleum fractionating apparatus; grinding apparatus and balls, etc., for grinding mills; thread guides for textile machinery and dies for extruding man-made textiles; plates, sticks, tips and the like, for tools.

(3) Containers of the kinds used for the commercial transport or packing of goods, e.g., large containers, carboys, etc., for the transport of acids and other chemical products; flagons, jars and pots, for foodstuffs (jam, condiments, meat pastes, liqueurs, etc.), for pharmaceutical products or cosmetics (pomades, ointments, creams, etc.), for inks, etc.

(4) Troughs, tubs and similar containers of the type used in agriculture.

69.09

The heading **excludes** :

(a) Articles of **heading 68.04**.

(b) Retorts, crucibles, muffles, cupels and other similar articles of refractory materials (**heading 69.03**).

(c) Kitchen or domestic containers (e.g., tea caddies, bread bins, biscuit barrels) (**heading 69.11** or **69.12**).

(d) General purpose jars and containers for laboratories and display jars for pharmacies, confectioners, etc. (**heading 69.14**).

(e) Articles of cermets (**heading 81.13**).

(f) Electrical apparatus (switches, junction boxes, fuses, etc.) of **headings 85.33 to 85.38**, and electrical insulators, insulating fittings, etc., of **heading 85.46** or **85.47**.

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Subheading Explanatory Note.

Subheading 6909.12

This subheading covers high-performance ceramic articles. These articles are composed of a crystalline ceramic matrix (e.g., of alumina, silicon carbide, zirconia, or nitrides of silicon, boron or aluminium, or of combinations thereof); whiskers or fibres of reinforcing material (e.g., of metal or graphite) may also be dispersed in the matrix to form a composite ceramic material.

These articles are characterized by a matrix which has a very low porosity and in which the grain size is very small; by high resistance to wear, corrosion, fatigue and thermal shock; by high-temperature strength; and by strength-to-weight ratios comparable to or better than those of steel.

They are often used in place of steel or other metal parts in mechanical applications requiring close dimensional tolerances (e.g., engine turbocharger rotors, rolling contact bearings and machine tools).

The Mohs scale mentioned in this subheading rates a material by its ability to scratch the surface of the material below it on the scale. Materials are rated from 1 (for talc) to 10 (for diamond). Most of the high-performance ceramic materials fall near the top of the scale. Silicon carbide and aluminium oxide, both of which are used in high-performance ceramics, fall at 9 or above on the Mohs scale. To distinguish among harder materials, the Mohs scale is sometimes expanded, with talc as 1 and diamond as 15. On the expanded Mohs scale, fused alumina has a hardness equivalent to 12, and silicon carbide has a hardness equivalent to 13.