32.14 - Glaziers' putty, grafting putty, resin cements, caulking compounds and other mastics; painters' fillings; non-refractory surfacing preparations for façades, indoor walls, floors, ceilings or the like.

3214.10 - Glaziers' putty, grafting putty, resin cements, caulking compounds and other mastics; painters' fillings

3214.90 - Other

The products of this heading are preparations of widely differing composition which are essentially characterised by the uses to which they are put.

These preparations are usually put up in a more or less pasty form and in general they harden or cure after application. However, some are in solid or powder forms which are made pasty at the time of use by heating (e.g., by melting) or by addition of a liquid (e.g., water).

The products of this heading are usually applied with a caulking gun, a spatula, a trowel, a plasterer's float or similar tools.

(I) GLAZIERS' PUTTY, GRAFTING PUTTY, RESIN CEMENTS, CAULKING COMPOUNDS AND OTHER MASTICS

These preparations are mainly used to stop, seal or caulk cracks and, in certain cases, to bond or firmly join components together. They are distinguished from glues and other adhesives by the fact that they are applied in thick coatings or layers. It should be noted, however, that this group of products also covers mastics used on the skin of patients around stomas and fistulas.

This group includes :

(1) **Mastics based on oil**. These are composed essentially of drying oils, fillers (whether they react with the oils or are inert) and hardeners. The best known product of this type is glaziers' putty.

(2) **Mastics based on wax (luting wax)**. These consist of waxes (of all kinds) to which resins, shellac, rubber, resin esters, etc., are often added to increase the adhesive effect. Mastics in which wax is wholly or partly replaced by products such as cetyl alcohol or stearyl alcohol are also considered as mastics based on wax. Mastics of this paragraph include grafting putties and sealants for coating barrels, casks, etc.

(3) **Resin mastics and cements**. These consist of natural resins (shellac, damar, rosin) or plastics (alkyd resins, polyesters, coumarone-indene resins, etc.), intermixed and usually with the addition of other materials (e.g., waxes, oils, bitumens, rubber, brick powder, lime, cements or any other mineral fillers). It should be noted that certain of these mastics are also covered by the types described below (e.g., those based on plastics or on rubber). The mastics and cements of this group serve many purposes, for example, as fillers in the electrotechnical industry or for sealing glass, metal or porcelain objects. They are generally applied after they have been made fluid by melting.

(4) **Mastics based on water-glass**. These are generally prepared at the time of application by mixing together two components. One of these consists of an aqueous solution of sodium silicate and potassium-sodium silicate and the other of fillers (quartz powder, sand, asbestos fibres, etc.). They are mainly used to seal sparking plugs, engine blocks and sumps, exhaust pipes, radiators, etc., and to fill or stop certain joints.

(5) **Mastics based on zinc oxychloride**. These are obtained from zinc oxide and zinc chloride to which retarding agents and, in certain cases, fillers are added. They are used for filling holes or cracks in wood, ceramics, etc.

(6) **Mastics based on magnesium oxychloride**. These are obtained from magnesium chloride and magnesium oxide, to which fillers (e.g., wood flour) are added. They are mainly used to stop or seal cracks in wooden articles.

(7) **Mastics based on sulphur**. These are composed of sulphur mixed with inert fillers. They are put up as solids, and are used to produce hard, waterproof, acid-resistant stoppings, and also to bond or fix pieces in place.

(8) **Mastics based on plaster**. These are put up as fibrous and flocculent powders, composed of a mixture of about 50 % plaster with other materials such as asbestos fibres, wood cellulose, glass fibres or sand. They are made pasty by the addition of water, and used to secure screws, gudgeon pins, dowels, hooks, etc.

(9) **Mastics based on plastics** (e.g., polyesters, polyurethanes, silicones and epoxide resins) whether or not containing a high added proportion (up to 80 %) of various fillers (e.g., clay, sand and other silicates, titanium dioxide, metallic powders). Some of these mastics are used after the addition of hardeners. Some mastics do not harden and remain tacky after application (e.g., acoustic sealants). Others harden by the evaporation of solvents, by solidification (hot-melt mastics), by curing after exposure to the atmosphere or by the reaction of different components mixed together (multi-component mastics).

Products of this nature are to be classified in this heading only if they are fully formulated for use as mastics. Mastics may be used to seal certain joints in construction or home repair, for sealing or repairing glass, metal or porcelain articles, as fillers or sealants for coachwork or, in the case of adhesive sealants, to bond various surfaces together.

(10) **Mastics based on zinc oxide and glycerol**. These are used to make acid-resistant coatings, to bond iron pieces to porcelain ware, and for joining tubes.

(11) **Mastics based on rubber**. These may be composed, for example, of a thioplast with the addition of fillers (graphite, silicates, carbonates, etc.) and in certain cases of an organic solvent. They are used, sometimes after the addition of a hardener, to give flexible protective coatings (resistant to chemical agents and to solvents), and also for caulking. These mastics may also be composed of aqueous dispersions of rubber, containing added colouring matter, plasticisers, fillers, binders or anti-oxidants, used for hermetically sealing metal cans.

(12) **Mastics of a kind used on the skin**. These may be composed, e.g., of sodium carboxymethylcellulose, pectin, gelatin and polyisobutylene in an organic solvent such as isopropyl alcohol. They are used, for example, on the skin of patients around stomas and fistulas as sealants to form a leakproof contact between the skin and waste collection bags. They have neither therapeutic nor prophylactic properties.

(13) **Sealing waxes**. They consist essentially of a mixture of resinous materials (e.g., shellac, rosin), together with a (usually high) proportion of mineral fillers and colouring matters. They are used to fill holes, for the watertight sealing of glass apparatus, for sealing documents, etc.

(II) PAINTERS' FILLINGS; NON-REFRACTORY SURFACING PREPARATIONS FOR FAÇADES, INDOOR WALLS, FLOORS, CEILINGS OR THE LIKE

These products differ from the mastics, etc., described above in that they are generally applied to larger surfaces. They are distinguished from paints, varnishes and similar products by their high content of fillers and (if present) of pigments; this content is generally much higher than that of the binders and solvents or dispersing liquids.

(A) PAINTERS' FILLINGS.

Painters' fillings are used to prepare surfaces (e.g., indoor walls) for painting by levelling out irregularities and, if necessary, filling in cracks, holes or porous surfaces. Paint is applied on them after they have hardened and been sanded.

This category also includes fillings based on oil, rubber, glue, etc. Fillings based on plastics with a composition similar to that of certain mastics of the same kind are also used for coachwork, etc.

(B) NON-REFRACTORY SURFACING PREPARATIONS.

Non-refractory surfacing preparations are used on façades, indoor walls, floors and ceilings, swimming pool walls and floors, etc., to make them waterproof and improve their appearance. Generally they remain visible as the final surfacing.

This group includes :

(1) Powdered preparations consisting of equal parts of plaster and sand with plasticisers.

(2) Preparations in powder form based on quartz and cement with small quantities of added plasticisers, used for instance, after adding water, for setting wall or floor tiles.

(3) Pasty preparations made by coating mineral fillers (ground marble, quartz, or a mixture of quartz and silicate, for instance) with a binder (plastics or resins), with added pigments and, where appropriate, water or solvent.

(4) Liquid preparations consisting, for instance, of synthetic rubber or acrylic polymers, asbestos fibres mixed with a pigment, and water. These are applied on façades with a paint brush or spray gun and form a much thicker layer than paint.

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In the case of certain of the products described above, the intermixture of the various constituents, or the addition of certain constituents, must be carried out at the time of use. Such products remain classified in this heading **provided** the constituents are :

(i) having regard to the method in which they are put up, clearly identifiable as being intended to be used together without first being repacked;

(ii) presented together; **and**

(iii) identifiable, whether by their nature or by the relative proportions in which they are present, as being complementary one to another.

However, in the case of products to which a hardener has to be added at the time of use, the absence of the hardener does not exclude these products from this heading, **provided** they are, by their composition or packing, clearly identifiable as intended to be used in the preparation of putties, mastics, fillings or surfacing preparations.

The heading **excludes** :

(a) Natural resins known in certain countries as " mastics " (**heading 13.01**).

(b) Plasters, lime and cements covered by **heading 25.20**, **25.22** or **25.23**.

(c) Mastics of asphalt and other bituminous mastics (**heading 27.15**).

(d) Dental cements and other dental fillings (**heading 30.06**).

(e) Brewers' pitch, and other products of **heading 38.07**.

(f) Refractory cements and mortars (**heading 38.16**).

(g) Prepared binders for foundry moulds or cores (**heading 38.24**).