## Chapter 74 Copper and Articles Thereof

### Chapter Notes

1. In this chapter, the following expressions have the meanings hereby assigned to them:

* Refined copper:

Metal containing at least 99.85% by weight of copper; or

Metal containing at least 97.5% by weight of copper, provided that the content by weight of any other element does not exceed the limit specified in the following table:

* Copper alloys:

Metallic substances other than unrefined copper in which copper predominates by weight over each of the other elements, provided that:

(1) the content by weight of at least one of the other elements is greater than the limit specified in the foregoing table; or

(2) the total content by weight of such other elements exceeds 2.5%

* Master alloys:

Alloys containing with other elements more than 10% by weight of copper, not usefully malleable and commonly used as an additive in the manufacture of other alloys or as de-oxidants, de-sulphurising agents or for similar uses in the metallurgy of non-ferrous metals. However, copper phosphide (phosphor copper) containing more than 15% by weight of phosphorus falls in heading 2848.

* Bars and rods:

rolled, extruded, drawn or forged products, not in coils, which have a uniform solid cross-section along their whole length in the shape of circles, ovals, rectangles (including squares), equilateral triangles or regular convex polygons (including 'flattened circles' and 'modified rectangles', of which two opposite sides are convex arcs, the other two sides being straight, of equal length and parallel). Products with a rectangular (including square), triangular or polygonal cross-section may have corners rounded along their whole length. The thickness of such products which have a rectangular (including 'modified rectangular') cross-section exceeds one-tenth of the width. The expression also covers cast or sintered products, of the same forms and dimensions, which have been subsequently worked after production (otherwise than by simple trimming or de-scaling), provided that they have not thereby assumed the character of articles or products of other headings.

Wire-bars and billets with their ends tapered or otherwise worked simply to facilitate their entry into machines for converting them into, for example, drawing stock (wire-rod) or tubes, are however to be taken to be unwrought copper of heading 7403.

* Profiles:

Rolled, extruded, drawn, forged or formed products, coiled or not, of a uniform cross-section along their whole length, which do not conform to any of the definitions of bars, rods, wire, plates, sheets, strip, foil, tubes or pipes. The expression also covers cast or sintered products, of the same forms, which have been subsequently worked after production (otherwise than by simple trimming or de-scaling), provided that they have not thereby assumed the character of articles or products of other headings.

* Wire:

Rolled, extruded or drawn products, in coils, which have a uniform solid cross-section along their whole length in the shape of circles, ovals, rectangles (including squares), equilateral triangles or regular convex polygons (including 'flattened circles' and 'modified rectangles', of which two opposite sides are convex arcs, the other two sides being straight, of equal length and parallel). Products with a rectangular (including square), triangular or polygonal cross-section may have corners rounded along their whole length. The thickness of such products which have a rectangular (including 'modified rectangular') cross-section exceeds one-tenth of the width.

* Plates, sheets, strip and foil:

Flat-surfaced products (other than the unwrought products of heading 7403), coiled or not, of solid rectangular (other than square) cross-section with or without rounded corners (including 'modified rectangles' of which two opposite sides are convex arcs, the other two sides being straight, of equal length and parallel) of a uniform thickness, which are:

\- of rectangular (including square) shape with a thickness not exceeding one-tenth of the width,

\- of a shape other than rectangular or square, of any size, provided that they do not assume the character of articles or products of other headings.

Headings 7409 and 7410 apply, inter alia, to plates, sheets, strip and foil with patterns (for example, grooves, ribs, chequers, tears, buttons, lozenges) and to such products which have been perforated, corrugated, polished or coated, provided that they do not thereby assume the character of articles or products of other headings.

* Tubes and pipes:

Hollow products, coiled or not, which have a uniform cross-section with only one enclosed void along their whole length in the shape of circles, ovals, rectangles (including squares), equilateral triangles or regular convex polygons, and which have a uniform wall thickness. Products with a rectangular (including square), equilateral triangular or regular convex polygonal cross-section, which may have corners rounded along their whole length, are also to be taken to be tubes and pipes provided the inner and outer cross-sections are concentric and have the same form and orientation. Tubes and pipes of the foregoing cross-sections may be polished, coated, bent, threaded, drilled, waisted, expanded, cone-shaped or fitted with flanges, collars or rings.

### Subheading note

1. In this chapter, the following expressions have the meanings hereby assigned to them:

* Copper-zinc base alloys (brasses):

Alloys of copper and zinc, with or without other elements. When other elements are present:

\- zinc predominates by weight over each of such other elements,

\- any nickel content by weight is less than 5% (see copper-nickel-zinc alloys (nickel silvers)), and

\- any tin content by weight is less than 3% (see copper-tin alloys (bronzes)).

* Copper-tin base alloys (bronzes):

Alloys of copper and tin, with or without other elements. When other elements are present, tin predominates by weight over each of such other elements, except that when the tin content is 3% or more the zinc content by weight may exceed that of tin but must be less than 10%.

* Copper-nickel-zinc base alloys (nickel silvers):

Alloys of copper, nickel and zinc, with or without other elements. The nickel content is 5% or more by weight (see copper-zinc alloys (brasses)).

* Copper-nickel base alloys:

Alloys of copper and nickel, with or without other elements but in any case containing by weight not more than 1% of zinc. When other elements are present, nickel predominates by weight over each of such other elements.

| Classification | Description |
| --- | --- |
| **7401 00 00** | **Copper mattes; cement copper (precipitated copper)** |
| **7402 00 00** | **Unrefined copper; copper anodes for electrolytic refining** |
| **7403** | **Refined copper and copper alloys, unwrought** |
|  | - Refined copper |
| **7403 11 00** | - - Cathodes and sections of cathodes |
| **7403 12 00** | - - Wire-bars |
| **7403 13 00** | - - Billets |
| **7403 19 00** | - - Other |
|  | - Copper alloys |
| **7403 21 00** | - - Copper-zinc base alloys (brass) |
| **7403 22 00** | - - Copper-tin base alloys (bronze) |
| **7403 29 00** | - - Other copper alloys (other than master alloys of heading 7405) |
| **7404** | **Copper waste and scrap** |
| **7404 00 10** | - Of refined copper |
|  | - Of copper alloys |
| **7404 00 91** | - - Of copper-zinc base alloys (brass) |
| **7404 00 99** | - - Other |
| **7405 00 00** | **Master alloys of copper** |
| **7406** | **Copper powders and flakes** |
| **7406 10 00** | - Powders of non-lamellar structure |
| **7406 20 00** | - Powders of lamellar structure; flakes |
| **7407** | **Copper bars, rods and profiles** |
| **7407 10 00** | - Of refined copper |
|  | - Of copper alloys |
| **7407 21** | - - Of copper-zinc base alloys (brass) |
| **7407 21 10** | - - - Bars and rods |
| **7407 21 90** | - - - Profiles |
| **7407 29 00** | - - Other |
| **7408** | **Copper wire** |
|  | - Of refined copper |
| **7408 11 00** | - - Of which the maximum cross-sectional dimension exceeds 6 mm |
| **7408 19** | - - Other |
| **7408 19 10** | - - - Of which the maximum cross-sectional dimension exceeds 0,5 mm |
| **7408 19 90** | - - - Of which the maximum cross-sectional dimension does not exceed 0,5 mm |
|  | - Of copper alloys |
| **7408 21 00** | - - Of copper-zinc base alloys (brass) |
| **7408 22 00** | - - Of copper-nickel base alloys (cupro-nickel) or copper-nickel-zinc base alloys (nickel silver) |
| **7408 29 00** | - - Other |
| **7409** | **Copper plates, sheets and strip, of a thickness exceeding 0,15 mm** |
|  | - Of refined copper |
| **7409 11** | - - In coils |
| **7409 11 00 20** | - - - Refined copper foil and -strips, electrolytically coated |
| **7409 11 00 90** | - - - Other |
| **7409 19** | - - Other |
| **7409 19 00 10** | - - - Plates or sheets: - with at least one layer of woven glass fibre, impregnated with a fire- retardant artificial or synthetic resin with a glass transition temperature (Tg) of more than 130 °C as measured according to IPC-TM-650, method 2.4.25, - coated on one or both sides with a copper film with a thickness of not more than 3,2 mm, and containing at least one of the following: - poly(tetrafluoroethylene) (CAS RN 9002-84-0) - poly(oxy-(2,6-dimethyl)-1,4-phenylene) (CAS RN 25134-01-4) - epoxy resin having a thermal expansion of not more than 10 ppm in length and width and not more than 25 ppm in height for use in the manufacture of circuit boards |
| **7409 19 00 20** | - - - Plates or sheets consisting of - a layer of a silicon nitride ceramic with a thickness of 0,32 mm (± 0,1 mm) or more but not more than 1,0 mm (± 0,1 mm) , - covered on both sides with a foil of refined copper with a thickness of 0,8 mm (± 0,1 mm) and - on one side partially covered with a coating of silver |
| **7409 19 00 90** | - - - Other |
|  | - Of copper-zinc base alloys (brass) |
| **7409 21 00** | - - In coils |
| **7409 29 00** | - - Other |
|  | - Of copper-tin base alloys (bronze) |
| **7409 31 00** | - - In coils |
| **7409 39 00** | - - Other |
| **7409 40 00** | - Of copper-nickel base alloys (cupro-nickel) or copper-nickel-zinc base alloys (nickel silver) |
| **7409 90 00** | - Of other copper alloys |
| **7410** | **Copper foil (whether or not printed or backed with paper, paperboard, plastics or similar backing materials) of a thickness (excluding any backing) not exceeding 0,15 mm** |
|  | - Not backed |
| **7410 11** | - - Of refined copper |
| **7410 11 00 10** | - - - Roll of laminate foil of graphite and copper, with: - a width of 610 mm or more but not more than 620 mm, and - a diameter of 690 mm or more but not more than 710 mm, for use in the manufacture of lithium-ion electric rechargeable batteries |
| **7410 11 00 30** | - - - Refined copper foil and -strips, electrolytically coated |
| **7410 11 00 90** | - - - Other |
| **7410 12 00** | - - Of copper alloys |
|  | - Backed |
| **7410 21** | - - Of refined copper |
| **7410 21 00 10** | - - - Sheet or plate of polytetrafluoroethylene, containing aluminium oxide or titanium dioxide as filler or reinforced with glass-fibre fabric, covered on both sides with copper foil |
| **7410 21 00 30** | - - - Film of polyimide, whether or not containing epoxide resin and/or glass fibre, covered on one side or on both sides with a copper foil |
| **7410 21 00 40** | - - - Sheet or plates: - consisting of at least a central layer of paper or one central sheet of any type of nonwoven fibre, laminated on each side with glass-fibre fabric and impregnated with epoxide resin, or - consisting of multiple layers of paper, impregnated with phenolic resin, coated on one or both sides with a copper film with a maximum thickness of 0,15 mm |
| **7410 21 00 50** | - - - Plates: - consisting of at least one layer of fibreglass fabric impregnated with epoxide resin, - covered on one or both sides with copper foilwith a thickness of not more than 0,15mm and - with a dielectric constant (DK) of less than 3,9 and a loss factor (Df) of less than 0,015 at a measuring frequency of 10GHz, as measured according to IPC-TM-650 |
| **7410 21 00 55** | - - - Plates: - consisting of at least one layer of fibreglass fabric impregnated with epoxide resin, - covered on one or both sides with copper foil with a thickness of not more than 0,15 mm, - with a dielectric constant (DK) of less than 5,4 at 1 MHz, as measured according to IPC-TM-650 2.5.5.2, - with a loss tangent of less than 0,035 at 1 MHz, as measured according to IPC-TM-650 2.5.5.2, - with a comparative tracking index (CTI) of 600 or more |
| **7410 21 00 60** | - - - Plates, rolls and sheets of synthetic or artificial resin: - with a maximum thickness of not more than 25µm, - coated on both sides with a copper film with a maximum thickness of 0,15 mm, - with a minimum capacitance of 1,09pF/mm$2, for use in the manufacture of circuit boards |
| **7410 21 00 70** | - - - Plates or sheets: - with at least one layer of woven glass fibre, impregnated with a fire- retardant artificial or synthetic resin with a glass transition temperature (Tg) of more than 130 °C as measured according to IPC-TM-650, method 2.4.25, - coated on one or both sides with a copper film with a thickness of not more than 3,2 mm, and containing at least one of the following: - poly(tetrafluoroethylene) (CAS RN 9002-84-0) - poly(oxy-(2,6-dimethyl)-1,4-phenylene) (CAS RN 25134-01-4) - epoxy resin having a thermal expansion of not more than 10 ppm in length and width and not more than 25 ppm in height for use in the manufacture of circuit boards |
| **7410 21 00 90** | - - - Other |
| **7410 22 00** | - - Of copper alloys |
| **7411** | **Copper tubes and pipes** |
| **7411 10** | - Of refined copper |
| **7411 10 10** | - - Straight |
| **7411 10 90** | - - Other |
|  | - Of copper alloys |
| **7411 21** | - - Of copper-zinc base alloys (brass) |
| **7411 21 10** | - - - Straight |
| **7411 21 90** | - - - Other |
| **7411 22 00** | - - Of copper-nickel base alloys (cupro-nickel) or copper-nickel-zinc base alloys (nickel silver) |
| **7411 29 00** | - - Other |
| **7412** | **Copper tube or pipe fittings (for example, couplings, elbows, sleeves)** |
| **7412 10 00** | - Of refined copper |
| **7412 20 00** | - Of copper alloys |
| **7413** | **Stranded wire, cables, plaited bands and the like, of copper, not electrically insulated** |
| **7413 00 00 10** | - With fittings attached, for use in civil aircraft |
| **7413 00 00 20** | - Loudspeaker centering ring, consisting of one or more vibration dampers and minimum 2 non-insulated copper cables, therein woven or pressed of the kind used in car loudspeakers |
| **7413 00 00 90** | - Other |
| **7415** | **Nails, tacks, drawing pins, staples (other than those of heading 8305) and similar articles, of copper or of iron or steel with heads of copper; screws, bolts, nuts, screw hooks, rivets, cotters, cotter pins, washers (including spring washers) and similar articles, of copper** |
| **7415 10 00** | - Nails and tacks, drawing pins, staples and similar articles |
|  | - Other articles, not threaded |
| **7415 21 00** | - - Washers (including spring washers) |
| **7415 29 00** | - - Other |
|  | - Other threaded articles |
| **7415 33 00** | - - Screws; bolts and nuts |
| **7415 39 00** | - - Other |
| **7418** | **Table, kitchen or other household articles and parts thereof, of copper; pot scourers and scouring or polishing pads, gloves and the like, of copper; sanitary ware and parts thereof, of copper** |
| **7418 10** | - Table, kitchen or other household articles and parts thereof; pot scourers and scouring or polishing pads, gloves and the like |
| **7418 10 10** | - - Cooking or heating apparatus of a kind used for domestic purposes, non-electric, and parts thereof |
| **7418 10 90** | - - Other |
| **7418 10 90 10** | - - - Hand-made |
| **7418 10 90 90** | - - - Other |
| **7418 20** | - Sanitary ware and parts thereof |
| **7418 20 00 10** | - - Hand-made |
| **7418 20 00 90** | - - Other |
| **7419** | **Other articles of copper** |
| **7419 10** | - Chain and parts thereof |
| **7419 10 00 10** | - - Hand-made |
| **7419 10 00 90** | - - Other |
|  | - Other |
| **7419 91** | - - Cast, moulded, stamped or forged, but not further worked |
| **7419 91 00 10** | - - - Hand-made |
| **7419 91 00 90** | - - - Other |
| **7419 99** | - - Other |
| **7419 99 10** | - - - Cloth (including endless bands), grill and netting, of wire of which no cross-sectional dimension exceeds 6 mm; expanded metal |
| **7419 99 30** | - - - Springs |
| **7419 99 90** | - - - Other |
| **7419 99 90 10** | - - - - Hand-made |
|  | - - - - Other |
| **7419 99 90 91** | - - - - - Disc (target) with deposition material, consisting of molybdenum silicide: - containing 1mg/kg or less of sodium and - mounted on a copper or aluminium support |
| **7419 99 90 99** | - - - - - Other |