

Summary of Indian Standards

IS 1417:2016 - Gold and gold alloys, jewellery/ artefacts - Fineness and marking - Specification

Gold jewellery is an ancient product which holds high value for its aesthetic appeal, biological significance, and commercial worth. Gold is widely bought product in the market for these reasons where there is also a need for strict surveillance. Gold exists naturally in its pure form but is also soft, hence the gold is alloyed with copper for strength in jewellery.

Due to this alloying practice and various in alloying element contents in gold, it is important to define certain grades of purity of gold for jewellery which in quantitative terms is called fineness. The Indian Standards IS 1417:2016 firstly defines various terms like Assaying, Carat, Fineness, Fine Gold, Gold Alloy, Standard Gold, Bullion, Coin etc and also specifies Grades of Fineness and their content of gold in parts per thousand, ppt. 24KF (Fine Gold with 999 ppt and above), 24KS (Standard Gold with 995 ppt and above), 23K (958 ppt), 22K (916 ppt), 20K (833 ppt), 18K (750 ppt), 14K (585 ppt) are the grades specified in the Indian Standard with fineness in ppt as minimum.

The Indian Standard also specifies the maximum permissible limits of Cadmium, Iridium, Ruthenium, Osmium, when tested by X-Ray Fluorescence method (XRF). Sampling for Gold Jewellery, Cupellation or Fire Assay of Gold Jewellery/Artefacts specified in IS 1418:2009, IS 15820:2024 Establishment and Operation of Assaying and Hallmarking Centres are also referred in IS 1417:2016. The Hallmarking Unique alphanumeric ID of Gold Jewellery/artefacts is also specified in this Indian Standard which is made mandatory as per the Quality Control Order.