Palladium

Read this article carefully and participate in the quiz below:

* **Introduction**
* **Palladium Purity and Composition**
* **Colour of Palladium**
* **Workability and Wear ability**
* **History of Palladium**
* **Other Applications**
* **Quiz**

**Introduction**

Deemed a smart, lighter alternative to platinum, palladium has gained immense popularity as a chosen metal for jewellery by women and men alike. Palladium is a precious metal that possesses an uncanny resemblance to platinum without the price tag. Its natural colour is white, so this metal does not require rhodium-plating to render it into a fashionable jewellery shop novelty. Another appealing characteristic of palladium is that it is hypoallergenic (nickel free) and resistant to tarnish caused by prolonged wear and exposure.

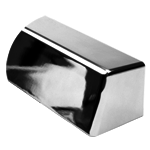
Jewellery makers have a wide selection of palladium jewellery pieces crafted considering quality, affordability, and unrivalled aesthetic standards. For shoppers who desire a stunning jewellery piece without having to pay an arm and a leg.

**Palladium Purity and Composition**

In jewellery manufacturing, a palladium piece should ideally adhere to the 95% standard of purity, identical to the purity level used in platinum jewellery creation. Ruthenium is added to the palladium alloy, as well as other hypoallergenic and practical metals that produce greater hardness and consistency.

Each palladium ring boast a purity of 950, which denotes a palladium content of 95% and an alloy composition of 5%. When purchasing palladium, always confirm the purity level is above 90%, the industry standard, and does not contain too large a quantity of other metals.

**Colour of Palladium**



Picture Palladium Colour

Palladium is most similar in colour to platinum. Like platinum, palladium has a bright white appearance regardless of whether or not it has a Rhodium plating. Over time, this bright white will take on a patina finish, but it will not yellow like white gold.

While some find the patina look desirable, a simple cleaning and polishing will return a palladium piece to its former lustre and shine. The layer of Rhodium often applied to white metals helps to prolong the bright white finish on palladium.

**Workability and Wear ability**

In terms of malleability, palladium scores high. It is known as one of the easiest precious metals to fashion into a specific shape or appearance. Moreover, it is best for gem setting purposes since the metal has little memory of form. This makes it perfect for men’s wedding bands, or simple women’s wedding bands, and classic solitaire rings. However, the malleability factor does cause palladium to fall short with more intricate designs, where platinum or 14K white gold could be better options.

Wear-ability is another admirable characteristic of palladium. In fact, it scores 15% higher than white gold in this area. Whereas white gold has a specific gravity of 12.7, palladium only measures at 12.0, meaning that it is considerably lighter. Lighter jewellery feels more natural, and lighter rings spin less on your finger.

**History of Palladium**

Palladium was discovered in 1802 by William Hyde Wollaston in South America. It was named after the asteroid Pallas and was initially questioned and suspected to be an alloy of mercury and platinum. Russia is the top producer of palladium, with countries like South Africa, the United States, Canada, Australia, and Ethiopia trailing distantly behind.



Picture Ancient Use of Palladium

Palladium has been used as a precious metal in jewellery-making since around 1939. During World War II, platinum was declared a strategic government resource and palladium became more common in jewellery. Throughout the last 50 years, the price of palladium has fluctuated, and was often more expensive than platinum. However since early 2000, due to a spike in the price of platinum, palladium became an accessible and affordable alternative to platinum.

**Other Applications**

Aside from its practicality in the jewellery industry, palladium also serves other purposes in the fields of electronics, dentistry, watch-making, science and technology, hydrogen storage, and even photography.

**QUIZ**

*Test your knowledge of palladium*

Full Name:

Is palladium a precious metal?

Which country is the largest producer of palladium?

☺

Thank you for taking the quiz

Table of Figures