

About Gold

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The Precious Metal Gold

“We have gold because we cannot trust Governments.” President Herbert Hoover

Gold Characteristic

Gold is a chemical element which can only be found and not manufactured. Gold is known for its rarity, softness, density and good in electrical conductivity. Until today, a total of 161,000 tonnes of gold have been mined in human history, as of 2009 (National Geographic: "The Real Price of Gold" by Brook Larmer). This is roughly equivalent to 5.175 billion troy ounces. The following are some gold's characteristic:

Chemical symbol: Au

Atomic no.: 79

Atomic weight: 196.967

Specific gravity: 19.32

Tensile strength: 11.9

Melting point: 1,063 degree

Hardness (Brinell): 25

Karat Gold Conversions

Karat is a measurement of the purity of gold in an alloy. Each karat represents a ratio of 1/24 -purity, indicating how many parts out of 24 are pure. Therefore, 24 karat gold is pure, while 18 karat gold is $\frac{3}{4}$ gold and $\frac{1}{4}$ alloy (Dictionary of international trade: handbook of the global trade community by Edward G. Hinkelman). Below are some example common used in bullion: -

24-karat = 0.995 to 0.000 pure (fine) gold

22-karat = 0.916 pure (fine) gold

18-karat = 0.750 pure (fine) gold

14-karat = 0.583 pure (fine) gold

10-karat = 0.4167 pure (fine) gold

Source:

The ABCs of Gold Investing "How to Protect and Build Your Wealth With Gold"
Second Edition - Michael J. Kosares

Gold Weights and Measures

By tradition gold is quoted and traded in troy ounces, these having been adopted by the U.S. Mint for the regulation of coinage in 1828. Unlike 'normal' pounds and ounces there are 12 troy ounces to the troy pound rather than 16. But a troy pound weighs less than in imperial pound (0.82 British/US pounds).

Cutting through all that nonsense a troy ounce is approximately 0.031kg or 31 grams.

The following gives an approximate conversion between traditional and metric weights.

Troy Ounce

Kilograms

Grams

1
0.031104
31.104

12
0.37325
373.25

32.150
1.000
1000

Sources:
(http://www.galmarley.com/framesets/fs_fundamental_properties_faqs.htm)

