

Sterling Silver

Melting Point 1640°. A metal alloy of silver (92.5%) and copper (7.5%). The addition of copper to silver makes it stronger. The copper in the alloy also causes sterling silver to tarnish. Firescale develops when heated with a torch.

Fine Silver

Melting Point 1762°. A pure metal. Fine silver is very soft. Appropriate for fusing. Does not tarnish or develop firescale when heated.

Silver Filled

A thick layer of .925 Sterling Silver mechanically bonded to a brass core comprised of copper and zinc. Silver Filled is 1/10 or 10% by silver weight. Silver Filled is hundreds of times thicker, more durable and more valuable than Silver Plated and has the same properties as Sterling Silver. Silver Filled is an economical alternative to Sterling Silver.

Gold Filled

Melting Point 1945° (pure gold). An actual layer of gold, pressure bonded to another metal. Gold filled items are made of brass or copper covered by sheets of gold in a mechanical bonding process. Gold filled is more valuable and tarnish resistant than gold plated. It does not flake off, rub off or turn colors. Gold filled is an economical alternative to solid gold and will last as long as 14K gold. The standard is to clad the core with 10% (by weight) 12K or 14K gold. That means that 5% of the metal is pure gold and is stamped 1/20GF.

Rose Gold Filled

Melting Point 1945° (pure gold). An actual layer of 14K gold (58.33%), zinc (1%) and copper (40.67%) pressure-bonded to brass. Rose gold filled items are made of brass covered by sheets of gold, zinc and copper in a mechanical bonding process. Rose gold filled is more valuable and tarnish resistant than rose gold plated. It does not flake off, rub off or turn colors. Rose gold filled is an economical alternative to solid rose gold and will last as long as 14K rose gold.

Copper

Melting Point 1981°. A pure metal. Copper is often alloyed with other metals for strength. Copper will tarnish.

Brass

Melting Point 1710°. Brass is an alloy of copper and zinc. The rich gold appearance makes it a good alternative to Gold and Gold Filled.

Nickel Silver

Melting Point 2030°. A metal alloy of copper (65%), nickel (18%) and zinc (17%). It is named for its silvery appearance and contains no elemental silver.

Aluminum

Very low melting point and therefore not recommended for heat treating in any way. Its low density gives aluminum the ability to resist corrosion and tarnishing. Lightweight, tarnish-resistant and hypo-allergenic alternative to Nickel Silver.

Anodized Aluminum

The anodizing process creates vivid colors on the surface of the metal only. The coloring is permanent, but may be engraved away exposing the silver colored aluminum underneath. This metal is lightweight and durable.

Temper

The malleability of metal is called "temper". Metal and wire for jewelry comes in two tempers.

Dead Soft Wire or Sheet has not been work-hardened and therefore is soft and easy to manipulate while fabricating or wire working. Wire and sheet stiffens when used, so most designs and wire wrapping are best done with dead soft material and will work harden when used. Pieces may be further work-hardened by hammering or tumbling.

Half Hard Wire or Sheet is work-hardened to stiffen. Half hard is usually used when wire working and making loops or shapes that need to retain their shape without hammering or tumbling. If your sheet or wire becomes too work-hardened it may be annealed to soften and return it to a working temper.

Be sure to check out our **FREE Annealing Metal Online Class at beaducation.com**.

