

9ct CY Yellow Alloy Properties and Process Data

- Versatile alloy with good fluidity.
- Good colour match with 9ct DF wrought material.
- Can be used in all investment casting applications.

Technical Information

Alloy Composition:

- 37.6% Gold,
- 10.3% Silver, + Zinc & Copper

Properties

- Colour Yellow
- Density 11.1g/cm³
- Melting Range 880 – 900°C
- Annealed Hardness 115 +/- 15 HV

Process Data

Casting:

The alloy has very good fluidity and form filling properties. This alloy is principally a casting alloy and as such is not usually employed for wrought products, because of possible embrittlement due to the small silicon addition. For wrought product manufacture, please use the alloy 9ct DF.

Casting temperatures should range from 980 – 1100°C, with the higher end temperatures reserved for fine, detailed work that can freeze off quickly. Typical flask temperatures should be 550-650°C.

Annealing:

This alloy may be annealed at 650°C in a furnace, the time depending on the size of the workpiece. Alternatively it may be heated to cherry red and allowed to cool.

Solders:

Any of the hallmarking quality 9ct gold solders supplied by Cookson may be used with this alloy.

Enamelling information:

Due to the presence of zinc this alloy may not perform satisfactorily when enamelled.