



Dental

GIALLOY PA

CE 0297

Non-Precious Cobalt Based Dental Casting Alloy for partial framework, Type 5

Gialloy PA

- Is suitable for the following casting techniques: centrifuge, vacuum pressure systems and torch
- Is highly corrosion resistant.
- Is qualified for laser-processing.

Directions for use

Modellation

To achieve complete flow out of wax copies the wall thickness must not be less than 0,5 mm.

Duplicating

For master model duplication **Gildouble S** or **Giu-Sil** is recommended

Investing

For casting **Gialloy PA** we recommend our phosphate bonded investment compound **Gilvest MG Speed** or **Gilvest MG vario**

Casting

For the melting process use ceramic crucibles only.
Cast as fast as possible before oxide layer is mixed with the molten mass. Cool down slowly after casting. Do not quench in water.

Soldering / welding

In case of necessary corrections or repair work please use **Gialloy** solder or **Gialloy** laser wire.

Polishing

The polishing is easy due to reduced surface-hardness of the alloy.

Caution

Never put **Gialloy** in acid bath!

Safety instructions

Inhalation of metal powder is harmful!
When sandblasting use suction with fine dust filter. Wearing of suitable personal protection equipment is recommended.

All data and recommendations are guidelines only and based on our technical experience. The above recommendations are given to the best of our knowledge. We grant the quality of our products according to our specification. Any further liability cannot be accepted since the proper application of our products is outside our control.



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Chemical composition and physical properties
according to DIN EN ISO 22674 : 2006

Gialloy PA Non-Precious Cobalt Based Dental Casting Alloy for Partial Framework, Type 5	
Nickel und Beryllium free	
Co	approx. 61,6 %
Cr	approx. 30,1 %
Mo	approx. 5,5 %
C	approx. 0,6 %
Si	approx. 1,0%
Fe	approx. 0,6 %
Mn	approx. 0,6 %
Hardness: (HV 10)	460
Elongation: (%)	> 2
Tensile Strength: (MPa)	< 700
0,2% Yield Strength: (MPa)	> 500
Young's Module (GPa)	> 150
Corrosion resistance ($\mu\text{g}/\text{cm}^3$)	< 200
Melting Interval ($^{\circ}\text{C}$) (Solidus – Liquidus)	1320 – 1380
Pre-heating temperature of ring ($^{\circ}\text{C}$)	910 – 950
Density (g/cm^3)	8,25