

Product: «Omegalloy PUR»

Description: Cobalt-Chromium-Model casting-Bonding alloy. (Free of beryllium and nickel)

Usage: Alloy for the manufacturing of fixed restorations.

Nominal analysis (chemical elements):

Co	Cr	Mo	C	Si	Mn	Other constituents
63,6%	28,5%	5,05%	0,34%	1,02%	1,0%	<1,0%

Alloy characteristics (standard value):

- Yield strength 550 - 600 MPa
- Tensile strength 800 Mpa
- Elongation $\geq 5,0$ %
- Modulus of elasticity 220 Gpa
- Vickers strength 355 HV
- Density 8,4 g/cm³
- Melting interval 1310 – 1380°C
- Casting temperature 1480°C

Modelling: To ensure proper flowing conditions within the model, the cap thickness should not fall below 2 - 3 mm. Attach sprueformer in the usual manner. For full cast crowns and bridge components, the incorporation of a lost sprue setting reservoir is the recommended approach.

Investing: «Omegalloy PUR» is consistent with all professionally available investment compounds. Preheating temperature $t = 900^{\circ}\text{C}$. For the desorption and preheating process, it is important to observe the manufacturer's instructions for the investment compounds, especially regard to holding time.

Casting: Please use your own crucible for «Omegalloy PUR».

Recommendation: Use only fresh alloy for an explicit batch tracing. Use only ceramic crucible.

Open-flame melting: Use acetylene or propane/oxygen. Precisely observe the torch's directions for use. Adjust the flame properly. It prevents contamination of the alloy.

High-frequently/open melting: Do not use flux. Initiate the casting procedure after the last of the ingots has collapsed. After casting, allow muffle to cool down to room temperature before deflasking. No water bath. We do not recommend reusing the casting balls.

Ceramic mass: Follow instructions of use of manufacturers. The TEC of the applied ceramic mass is to be considered. Long-term cooling is not required.

After deflasking: Then sandblast the frameworks with aluminium oxide 150 μm and clean with dist. water, ultrasonic bath of steam blasting. Irradiate critique areas gently with aluminium oxide 50 μm . Shininess, rubberrise and polish. Grind the frameworks with the usual milling cutters of Al - oxide stones or dist. water, ultrasonic bath of steam blasting.

Brazing: For «Omegalloy PUR» you can use commercial solders (Cerabond Solder). Do not use Gold- or Palladium solder.

Guarantee: Whether given verbally, in writing or by practical instructions, our recommendations for use are based upon our own experience and trials and can be considered as standard values. Our products are subject to a constant further development. Therefore alterations in construction and composition are reserved.

Packaging: «Omegalloy PUR», 1000g, / 250 g