

# VENTURA ORCAST plus

## COPPER-ALUMINUM BASE ALLOY FOR FIXED DENTAL PROSTHESES

### INDICATIONS FOR USE

- Crowns and bridges covered with resin (acrylics and composites).
- Crowns.
- Inlays and onlays.
- Posts.

### PROPERTIES

TENSILE STRENGTH	495 MPa
PROOF STRENGTH OF NON PROPORT.	
ELONGATION R <sub>p0.2</sub>	290 MPa
ELONGATION AT FRACTURE	29 %
VICKERS HARDNESS	152
CASTING TEMPERATURE	1125 °C
SPECIFIC GRAVITY	7.8 g/ml

### INSTRUCTIONS FOR USE

#### SPRUES

Sprues should be as short as possible and their diameter not less than 3 mm. The use of reservoirs and ventilation ducts is recommended.

#### WAXING

May be done with current technique. Thicknesses of the walls should not be less than 0.4 mm.

#### INVESTMENT

Use phosphated investment. We particularly recommend **HIGH VEST** phosphated investment materials, that have been developed for this type of alloys. Gypsum base investments may also be used.

#### PREHEATING THE CASTING RING

Preheat the rings following the instructions for the investment to a final temperature of 800 °C with phosphated investments and 700 °C with gypsum base investments, maintaining this temperature for 30 to 60 minutes, depending on the size of the ring.

#### MELTING

Use ceramic crucibles that are completely clean and for exclusive use with this alloy. It is advisable to preheat the crucible together with the casting rings.

It is preferable to cast only new metal in order to obtain optimum results and to be able to clearly identify the lot. If remelting, use alloy from the same lot in order to assure that traceability is not lost, and adding at least 50% new metal.

For melting by gas-oxygen torch, the use of a shower type tip is recommended.

The gas may be methane (domestic gas), or preferably propane-butane (bottled gas).

### CASTING

Move the torch with a circular motion without withdrawing the flame from the crucible, and release the centrifuge when the ingots begin to slump and appear to have a rounded shape but have not yet blended together. Do not overheat the alloy. Cool the ring slowly to room temperature.

### PREPARATION OF THE METALLIC STRUCTURE

**IMPORTANT : Inhaling metallic powders is harmful to health.**

**Use efficient aspiration during grinding and sand blasting.**

**Grind** with tungsten carbon burs or aluminum oxide stone.

**Finish** with rubber polishers and high sheen polishing paste.

### SOLDERING

For soldering pre-ceramic we recommend **SOLDADURA ORCAST** solder with a Flow Point of 890 °C and the use of **ORCAFLUX** as flux.

### CONTRAINDICATIONS

Known allergy to any of the components of the alloy. The dentist should be advised that this alloy contains nickel.

### SECONDARY EFFECTS

Isolated cases of allergy by contact with products of similar composition have been reported.

### INTERACTIONS

The use of different alloys in the same patient may cause occasional discomfort due to electrochemical causes.