

remanium® secur a

CE 0483

**Composition (Percentages by mass)**

Co	Cr	Mo	W	Si	Ta
58	30	3	5.5	1.5	1.25

Additional elements less than 1 %: N

**Technical data (ISO 9693)**

Yield strength $R_{p0.2}$ (MPa)	760
Tensile strength $R_m$ (MPa)	940
Modulus of elasticity E (GPa)	211
Hardness (HV <sub>10</sub> )	340
Fracture elongation A <sub>5</sub> (%)	5.3
Solidus T <sub>s</sub> (°C / °F)	1329 / 2424
Liquidus T <sub>l</sub> (°C / °F)	1385 / 2525
Density g/cm <sup>3</sup>	8.6
CTE (25-500 °C/77-932 °F) (K <sup>-1</sup> )	14.4 x 10 <sup>-6</sup>
Melting	+++
Casting	+++
Torch melting	+++
Finishing	++
Milling characteristics	++
Ceramic bonding	+++
Polishing	+++
Oxide bake	No
Laser welding	+++
Soldering with CoCr	REF 102-306-00
Investment material	Castorit® all speed Trivest Castorit® super C

+++ = excellent, ++ = very good

**Availability**

50 g	<b>REF 102-631-00</b>
250 g	<b>REF 102-632-00</b>
1000 g	<b>REF 102-630-00</b>

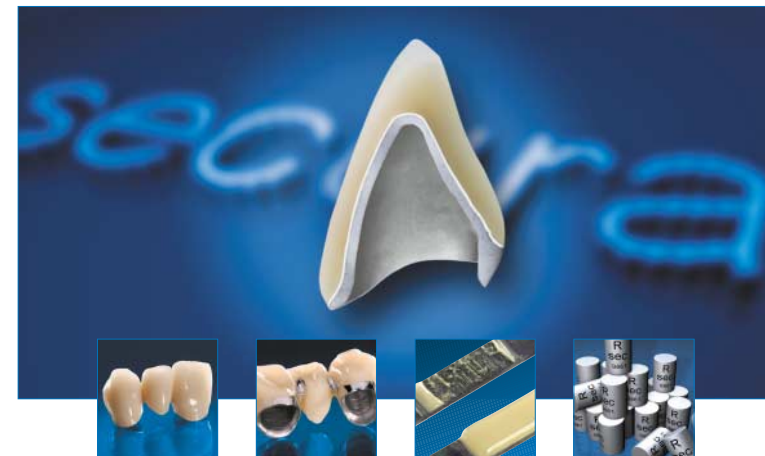
Our dental technical advisors will be pleased to help you with any questions regarding the use of our products.

**Customer support +49 72 31/803-410****Fax +49 72 31/803-295****Orders +49 72 31/803-210**

Informationen and instructions for using of the Dentaurum alloys can be found on the internet at

**[www.dentaurum.com](http://www.dentaurum.com)**

Date of information: 03/05



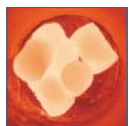
**remanium® secur a**  
Your guarantee for perfect results



## Excellent metal-ceramic bond strength

**Highest degree of reliability for technician, dentist, and patient**

The first-class melting and casting characteristics of this alloy are the basis for perfect castings and excellent metal-ceramic bond strength.



## Outstanding melting and casting properties

**Safe and easy to use in all casting processes**

The clear view of the molten metal, with no spattering or increased slagging, is *remanium® secura's* quality attributes, not just when it comes to vacuum/pressure casting.

## Small ingots allow exact portioning of the alloy

**Increase your laboratory's profitability**

The small 4-gram ingots allow more accurate portioning of the required amount of alloy in the crucible. This will noticeably save money.

## remanium® *secura* – reinforced with mixed tantalum crystals

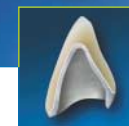
**Allows slender framework structures**

The alloy's high mechanical strength is based on the formation of mixed tantalum crystals, allowing the most slender structuring of your framework.

## Ideal firing behaviour

**New chemical composition**

*remanium® secura's* new chemical composition generates only a thin oxidation layer, creating excellent bond strength between alloy and porcelain, far higher than required by the standard.



## Outstandingly good laser welding properties

**Free from carbon**

Can be joined easily, with good results.

