

**PREMIERE**  
**HIGH NOBLE YELLOW CERAMIC ALLOY**  
**Au & Pt Group: 97.9%**

<b>PROPERTIES*</b>	
Melting Range	1960-2155°F 1070-1180°C
Coefficient of Thermal Expansion from 25-500°C	14.3
from 25-600°C	14.6
Density	18.8 g/cm <sup>3</sup>

<b>CHEMISTRY</b>	
Gold	85.0%
Platinum	12.4%
Zinc, Indium, Manganese	
Rhodium, Rhenium	<1%

<b>AFTER PORCELAIN FIRING*</b>	
Hardness	210 HV
Tensile Elongation	9%
Tensile Yield Strength/Proof Stress	71,790 psi / 495 MPa
Ultimate Tensile Strength	88,470 psi / 610 MPa
Modulus of Elasticity	13.6 x 10 <sup>6</sup> psi / 94,000 MPa

\* Test methods conform to ISO Standard 9693 and ANSI/ADA 38

**PROCESSING TECHNIQUE**

- WAXING** 0.3mm for single units and 0.5mm for bridgework
- INVESTMENT** Phosphate-bonded high heat investment with or without carbon
- BURNOUT** 1350°F (735°C)
- MELTING AND CASTING** No extra turns of the casting arm are required (2-3 turns).  
 Multi-orifice torch: 7 psi fuel and 15 psi oxygen (0.5 bars fuel and 1.0 bars oxygen).  
 Heat until cloudy surface clears before releasing the casting arm. **DO NOT OVERHEAT.**  
**DO NOT USE CASTING FLUX.** Use a minimum of **50%** new metal when remelting buttons.  
 Casting temperature ~2335°F (1280°C).
- FINISHING** Finish with aluminum oxide stones. Blast porcelain receiving surfaces with non-recycled aluminum oxide at 40-60 psi (3-4 bar) air pressure. Clean in ultrasonic for 10 minutes.
- CONDITIONING (Degassing, Oxidation)**  
 Oxidize at 1740°F (950°C) in air. Hold for 5 minutes. Bench cool.  
 Proceed with normal opaque technique.
- SOLDERING**
- |             |   |
|-------------|---|
| Pre-solder  | CPS   |
| Post-solder | 615 Solder  |
| Flux        | Brown Fluoride Flux (for both pre & post soldering) |

*Jensen Technical Service is available 8:00 AM - 8:00 PM EST by calling 1-800-243-2000*



5234Y Rev.0