

TECH SPECS : 92.5 Silver / 3.0 % Palladium Sterling( Patent Pending )

For casting machines:

FINENES : 92.5 % Silver, 3.0% Palladium.

DENSITY : 10.6 g/ccm VS 10.4 g/ccm for regular sterling.

INVESTMENT : Use your regular sterling investment.

MELT RANGE : 954-963°C (1750-1765°F)

Please protect metal with inert gas during the melting process

PASTY RANCE : 907-960°C (1665-1760°F)

CASTING RANGE: 1010-1030°C (1850-1886°F)

FLASK RANGE : Depends on part (s) weight or type. In general, We believe this alloy should be cast at flask temperatures of 100 to 200F higher than you currently use for traditional sterling castings. It is important to holdflask @ intended temperature or “at least 1 hour” prior to casting. We suggest test casting with 1 flask @ same temperature as you normally do for Traditional Sterling, a 2<sup>nd</sup> flask 100 f (38°C) higher and a 3<sup>rd</sup> @200 F(93°C) higher to establish the optimum temperatures for your oven and specific parts.

QUENCH : 15 to 20 minutes (quicker = softer castings, longer=harder)

HEAT TREAT : Place pieces on trees in 700°C (1290F) oven for 45 to 60 minutes. Turn off oven and let the oven cool at room temperature (about on hour more).

PICKLE : Pickling with SPAREX (Granular Sodium Bisulfate) is recommended. After pickling, the Sprues and trees (to be re-cast), should be tumbled & thoroughly rinsed & cleaned prior to casting.

METAL MIX : At least 60% new to 40 % old. It is important to “thoroughly clean” the old (used) metal prior to re-using. It is imperative to “re grain” the buttons& sprues if you plan to reuse them to eliminate the sulfur dioxide from previous melts.

FLUX : Not necessary with this metal. If desired- use 25 % granular Boric Acid and 75 % granular Borax nixed on the button.

MACHINE NOTES: If casting with a frequency machine, always cast “on the upswing” of the metal heating cycle. Always retrieve flask well before casting temperature is reached, then cast it when temperature reaches set point.