

## PLATILITE

**Purpose** - All purpose

**Advantage** - Heat Treatable, soft, fabricable

### Physical & Mechanical Properties

Composition		Density (g/cc)	Hardness (HV)	
Ag	95.00%		10.45	
Pt	2.00%	As cast		75
Zn	3.00%	1 stage hardened		97

### Melting & Casting Instructions

Temperatures			Process parameters	
<b>Casting</b>	990° - 1020° C	1813° - 1867° F	<b>Quench Time</b>	25-30 minutes
<b>Flask</b>	540° - 675° C	1004° - 1247° F	<b>Remelting</b>	50% fresh mix

### Heat treatment Instructions

#### 1 Stage Hardening process for high hardness:

Heat the sample at 450° C for 2 hours and air cool.

**Note:** Cover the object with slurry of Borax / Boric acid paste to protect the surface from discoloration.

### General Instructions

- **Fluxing:** It may be necessary to flux these silver melts. We recommend Boric Acid. Do not use Carbon Containing Fluxes or Charcoal. Skim any surface oxides off the surface before stirring.
- **Investment removal:** *Flouric based* investment removers are the best for silicon oxide invisible coating. Use of aggressive acid causes corrosion and surface damage. *United's brite cast* works very effectively.
- To calculate the weight of the metal needed (in grams), multiply density (gm/cc) with weight of wax (grams). Add 10% of the total weight for button.

**Note:** There are proprietary metals in the formulation which are not included in the composition section.

Technical Assistance: Always available... Call: **1-800-999-3463 / 1-800-999-FINE**

E-mail: [techteam@unitedpmr.com](mailto:techteam@unitedpmr.com) Web-Site: [www.unitedpmr.com](http://www.unitedpmr.com)

