

Physical & Mechanical Properties

| Composition | | Color Coordinates | | | | Density (g/cc) | | As cast Hardness (HV) | |
|-------------|--------|-------------------|-------|------|-------|----------------|-------|-----------------------|-----|
| | | Karat | L* | a* | b* | 10K 970 | 11.13 | 10K 970 | 147 |
| Cu | 60.30% | 10K 970 | 87.92 | 0.62 | 12.34 | 14K 970 | 12.67 | 14K 970 | 162 |
| Ag | 7.30% | | | | | | | | |
| Zn | 19.00% | | | | | | | | |
| Ni | 13.40% | | | | | | | | |

Melting & Casting Instructions

| Temperatures | | | |
|--------------|------------|-----------------|-----------------|
| | Karat | °C | °F |
| Pre alloying | 9K - 14K | 1040° - 1050° C | 1904° - 1922° F |
| Casting | 10K | 1005° - 1025° C | 1841° - 1877° F |
| | 14K | 1000° - 1020° C | 1832° - 1868° F |
| Flask | 9K - 14K | 540° - 675° C | 1004° - 1247° F |
| Quench Time | 15 Minutes | Remelting | 70% Fresh Mix |

General Instructions

- Very little *boric acid* flux is recommended. Do not use carbon flux such as soda ash, saltpeter etc. No flux needed in bottom pour automatic casting unit.
- *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* investment removers works 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.
- *Gypsum bonded* investment is recommended. Follow manufacturer's instruction for burnout cycle.

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

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