

Color - Dark Yellow Purpose - All Purpose Karat - 18K - 22K

| | Physical & Mechanical Properties | | | | | | | | | | | |
|----------|----------------------------------|----------------|-------------------|-------|------|-------|----------------|-------|-----------------------|-----|--|--|
| Cor | Composition | | Color Coordinates | | | | Density (g/cc) | | As cast Hardness (HV) | | | |
| Cu Ag | | 60.0% 20.0% | Karat | L* | a* | b* | 18K 384 | 14.79 | 18K 384 | 189 | | |
| Ga | | 10.0% | 18K 384 | 86.04 | 4.68 | 20.17 | 22K 384 | 17.53 | 22K 384 11 | 112 | | |
| Ni | i | 10.0% | 22K 384 | 86.53 | 5.61 | 26.82 | | | | 113 | | |

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Melting & Casting Instructions

| Temperatures | | | | | | | | | | | |
|--------------|---------------|-----------------|-----------------|--|--|--|--|--|--|--|--|
| | Karat | °C | °F | | | | | | | | |
| Pre alloying | 18К - 22К | 1110° - 1130° C | 2012° - 2066° F | | | | | | | | |
| Casting | 18K | 920° - 940° C | 1688° - 1724° F | | | | | | | | |
| Casting | 22K | 1020° - 1040° C | 1868° - 1904° F | | | | | | | | |
| Flask | 18K - 22K | 510° - 650° C | 950° - 1202° F | | | | | | | | |
| Quench Time | 15-20 Minutes | Remelting | 50% 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 aggresive 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.

• <u>Gypsum bonded</u> investment is recommended. Follow manufacurer'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 E-mail / techteam@unitedpmr.com Web-Site / www.unitedpmr.com