
UNITED “DARK YELLOW” ALLOY # 394

Thank you for using UNITED’S alloys.

UNITED’S # 394 ALLOY is designed for **18 K – 22 K** dark yellow gold **casting & fabrication**, which produces a **Dark Yellow** color.

MELTING

We do recommend pre-alloying all alloy and fine gold with aggressive stirring & fluxing to assure a uniform mixture.

Step : 1	Pre- Alloying (Fine gold + alloy) Temp 18 K	1070° - 1080° C 1958° - 1976° F
	Pre- Alloying (Fine gold + alloy) Temp 20 K – 22 K	1100° - 1130° C 2012° - 2066° F
Step : 2	Casting Temperature for Alloyed Grain 18 K	1000° - 1010° C 1832° - 1850° F
	Casting Temperature for Alloyed Grain 20 K – 22 K	1080° - 1100° C 1976° - 2012° F

NOTE: Melt temperature may vary with type of unit. This alloy is designed for Casting and Fabrication (Rolling, Wire, Tube, Sheet).

FLASK TEMPERATURE

For 18 K, use normal recommended temperature.

For 20 K – 22 K Vacuum casting **676° - 730° C**
1250° - 1350° F

For 20 K – 22 K Centrifugal casting **537° - 565° C**
1000° - 1050° F

FLUXING

Boric Acid is the recommended flux. Use as little flux as possible. Do not use carbon fluxes or any fluxes designed for refining; i.e., soda ash, saltpeter, etc. Avoid flux in bottom pour automatic casting units.

QUENCH TIME

15-20 minutes.

**INVESTMENT
REMOVAL**

Most standard investment removers will successfully remove the investment powder. Fluoric-based investment removers are the best for removing the silicon oxide invisible coating. Use of aggressive acids causes stress corrosion and surface damage and is therefore not recommended.

UNITED’S Brite-Cast™ Investment Remover works effectively in removing fire scale as well as preventing stress corrosion or surface damage of the cast piece.

REMELTING

We recommend 50% rejuvenation for re-melting.

**TECHNICAL
ASSISTANCE**

Always available... Call 1-800-999-3463 / 1-800-999-FINE

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