

**UNITED “MEDIUM YELLOW” ALLOY # 391**

Thank you for using UNITED’S alloys.

UNITED’S # 391 ALLOY is designed for **18 K – 22 K** medium yellow gold **casting & fabrication**, which produces a **Medium Yellow color**, popular in the middle-east.

**MELTING**

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

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

**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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