

UNITED "STANDARD YELLOW" ALLOY # 821

Thank you for using UNITED'S alloys.

UNITED'S # 821 ALLOY is designed for **9K-14K & 19 K – 22 K** yellow gold **casting & fabrication**, which produces a **Standard Yellow color**. This alloy is not recommended for 18 karat usage.

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) Temperature	1050° - 1100° C 1922° - 2012° F
Step : 2	Casting Temperature for 9K-14K Alloyed Grain	971° - 990° C 1780° - 1815° F
	Casting Temperature for 19K-22K Alloyed Grain	1040° - 1060° C 1904° - 1908° F

FLASK TEMPERATURE

For Vacuum casting	676° - 730° C 1250° - 1350° F
Use higher range for 19K-22K	
For Centrifugal casting	565° - 730° C 1050° - 1350° F
Use higher range for 19K-22K	

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

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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