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**UNITED CASTING BRONZE ALLOY # 342**

**COMPOSITION**

**15% ZINC, 5% TIN, 80% COPPER**

UNITED'S # 342 Casting Bronze is a Standard Yellow bronze designed to cast jewelry samples, models, belt buckles, art objects, etc. It finishes to a Standard 14 K color and easily solders with silver or low gold formulas. # 342 has a much better resistance to tarnish than brass alloys, as well as a harder surface. # 342 also contains a silicon de-oxidizer for clean casting. Using 25 % by weight of # BR-REPL replenisher with this alloy greatly improves the castability of scrap and tarnish resistance of this alloy. Specific Gravity of this alloy is 8.62.

You should obtain excellent results by following a few simple instructions.

**MELTING**

Casting Temperature **1048° C - 1055° C**  
**1920° F - 1930° F**

**NOTES: Melt temperature may vary with type of unit. # 342 Bronze should not be used for gold casting! # 342 Bronze should not be cyanide gold plated, use acid gold plating unless nickel sub-plate is used. For # 342 Bronze, we recommend an ultrasonic cleaning solution called BCR available from OKITE, phone # 1-800-526-4473 ext. 2411. Some kind of Anti -Tarnish coating / Lacquering on the jewelry is highly recommended since the tarnish resistance of this alloy is poor. Please visit : <http://www.permalac.com/products.asp?gclid=CPqyxbT4obUCFUOK4AodUgIAEQ> for more information on lacquering products.**

**FLASK TEMPERATURE**

Normal recommended temperature in the range of **580° C to 700° C / 1076° F – 1292° F** depending on size of flask, karat & type of jewelry.

**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 depending on size of flask & type of jewelry.**

**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.**

**TECHNICAL  
ASSISTANCE**

Always available... Call 1-800-999-3463 / 1-800-999-FINE  
E-mail / [doc@unitedpmr.com](mailto:doc@unitedpmr.com) Web-Site / [www.unitedpmr.com](http://www.unitedpmr.com)

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