UNITED CASTING BRONZE ALLOY # 342

Thank you for using UNITED’S alloys.

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 5 % by weight of # 99 replenisher with this alloy greatly improves the castability 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**

<table>
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<th>Casting Temperature</th>
<th>1048° C - 1055° C</th>
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<td>1920° F - 1930° F</td>
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**NOTES:** Melt temperature may vary with type of unit. This alloy is designed for casting only. # 342 Bronze should not be used for gold casting! # 342 Bronze should not be cyanide gold plated, use acid gold plating unless nickel subplate 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 on the jewelry is highly recommended since the tarnish resistance of this alloy is poor.

**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.

**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 Web-Site / www.unitedpmr.com