

Goldie Sculptor's Bronze<sup>TM</sup> is bronze of a beautiful golden color, which is very hard after firing. It is formulated with long carbo-hydrogen chains in the binder formula to have much greater strength and more resistance to collapse under its own weight than regular bronze clays and is more cohesive when wet and stronger after the first firing step. This allows the artist sculptor to create much larger designs. Another aspect of Sculptor's Bronze is its silky smooth texture and with appropriate hydration it can be thrown on a potter's wheel.

Goldie Sculptor's Bronze TM is well suited for sculptures and larger forms of jewelry. You can shape the wet and dry clay using chisels and other traditional sculptor's tools.

Goldie Sculptor's Bronze™ is environmentally friendly. It contains approximately 90% copper and 10% tin. The binders are organic and non toxic. The container that the powder comes in is deliberately larger than needed so it can be reused afterwards. Please do your part for the environment and keep the container for future use (non food use only).

Goldie Sculptor's Bronze<sup>TM</sup> shrinks by about 9%-14% on firing, depending on the shape and the size of the piece. Dried clay can be ground up to a powder and reconstituted. Goldie Bronze<sup>TM</sup> is easy and economical to use.

## TO MIX

- Put the all amount of powder into a jar or bowl.
- Add about numerous drops of water or spray in a little water and mix well with a knife or spoon, adding more water as required, until you get a clay of a plasticine like consistency. The water does not need to be distilled tap water is fine.
- Roll the lump clay out thinly and fold over. Roll again, rolling away from the fold. Repeat this action several times. This is very important to ensure that all the air is

removed from the clay and to get a smooth consistency before using. Insert into a plastic bag or container and wait for 30 minutes.

## TO USE

To join elements and repair seams in Goldie Sculptor's Bronze<sup>TM</sup> clay mix a little powder with water to make a paste. Elements can also be joined with the water only method in the same way as silver clay. If you want to join a fired piece to an unfired piece or two fired pieces it is best to use Sherri Haabs PasteMaker<sup>TM</sup> to hydrate the clay.

Pieces can be dried naturally or by using heat, e.g. on a hotplate or in a dehydrator. Dry at 200°F (94°C) or lower. Higher temperatures may cause cracking, and the creation of steam bubbles. Larger pieces can be dried in a kitchen oven as long as 200°F is not exceeded.

Components up to 100 grams will typically dry naturally in 24 hours. Weights in excess of 100 grams should be naturally dried for 2-5 days. A faster method is to use a warming plate allowing the components to dry for 2-5 hours. Large items (above 300g) should be dried for 6-10 hours.

Remember to always clean your tools well between different brands and types of metal clays to avoid cross contamination. This does NOT apply to metals from the Goldie Metal<sup>TM</sup> line because you can mix them together for Mokume Gane and other techniques.

## TO FIRE

- Ensure the clay is completely dry before firing. Any moisture will boil and ruin the piece.
- Lay the pieces in a stainless steel firing container on a layer of activated coconut shell carbon with a minimum depth 1/2" (1cm) under the pieces. Do not cover with carbon for this step. Make sure the pieces are at least 1/2" (1cm) apart. Place the open container into a cold kiln and fire at full ramp to 670°F (350°C) and hold for 30 minutes for pieces up to 100g. Pieces larger than 100g hold for 45 minutes, larger than 200g 45 minutes, larger than 200g 1 hour, larger than 300g 1.5 hours.
- Carefully remove the container from the kiln and place on a heatproof surface. Fill the container with a layer of activated coconut shell carbon with a minimum depth 1/2" (1cm) over the pieces and place back into the kiln. Do a full ramp to 1525°F (830°C) and hold for 1 hour for pieces up to 100g. In the case of large elements, the time should be properly extended to 1h-30min for 100-200g For elements over 300 grams fire for a minimum of 2 hours for more flat elements and a minimum of 3 hours for more rounded elements
- Fired pieces can be removed from the kiln hot or cold.

## **SAFETY PRECAUTIONS**

Do not breathe in the powder or ingest Goldie Sculptor's Bronze<sup>TM</sup>. Always use the appropriate safety equipment when working with a hot kiln and fire in a well ventilated area. Goldie Sculptor's Bronze<sup>TM</sup> is non-toxic and does not contain any harmful chemicals. There have been no reports of any allergic reaction to Goldie Sculptor's Bronze<sup>TM</sup>, however people with allergies should be aware of the possibility of a reaction and use with care.

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