

The Compleat Sculptor presents...

## Sculpting Foam Part III: Balsa-Foam



Part III of our *Sculpting Foam* project sheet series will focus on Balsa-Foam. Making forms in Balsa-Foam is safe and easy with the right tools and safety precautions. Balsa-Foam can be coated with a variety of foam coating materials and is most often painted or used to make molds from.

For more on the different types of rigid foam and their characteristics and differences, see our past project sheets; *Sculpting Foam Part I & II*.

### A little about Balsa-Foam:



Balsa-Foam is made from a different material from the other foams we have talked about. It was formulated for the design and model making industry and can be easily and quickly carved, filed, sawed, sanded, impressed, drilled, coated and painted. Balsa-Foam is available in two densities; 7lbs per square foot and 12lbs per square foot. The denser the Balsa-Foam the harder and heavier it is and the more detail it will take.

The 7lb Balsa-Foam is ideal for quick studies however it is not very durable without coating. The 12lb Balsa-Foam is more durable than the 7 lb and is typically hard enough for vacuum forming. Both have a smooth texture, take fine detail and offer little resistance to carving tools.

### Suggested Tools:

Balsa-Foam can be carved with almost anything including files, rasps, knives, saws, wood chisels, stone chisels, linoleum carving tools, Microplanes, sand papers and power tools. It is the most versatile of the foams when it comes to carving tools.

Hot tools do not work on Balsa-Foam because it melts at a higher temperature than other foams making the hot tools ineffective. Hot tool use is also strongly discouraged because burning Balsa-Foam creates especially toxic fumes.



Balsa-Foam will corrode and tarnish all metals therefore it is recommended that any metal tools used should be wiped off after use with a clean cloth.

### Tool Quality:

As with most foams, since they are soft, almost any quality tools are sufficient for use on Balsa-Foam and will last a very long time since the level of resistance from the foam is negligible.

## Coating:

Balsa-Foam can be coated with a number of materials including plaster, AquaResin, Magic-Smooth, and acrylic modeling paste. Each coating material has its own unique characteristics in regards to thickness, cure time and finishing techniques. Choose the one that best suits your particular project. Envirotex pourable coating epoxy can also be used and can be thinned with rubbing alcohol if necessary for your application. Thinning can increase cure time, but can offer a thinner coating. Rigid coating materials can be brittle exhibiting surface cracking or caving in under pressure. Balsa-Foam can also be painted with water or solvent based paints.

## Mold making:

Coating the Balsa-Foam with a thin coat of resin prior to making a mold can be very helpful. Then apply the appropriate release agent for your mold material.

## Safety:

While carving, filing, sanding and clean-up use a high quality particulate respirator. The manufacturer states: "Balsa-Foam has been rated non-toxic by the Arts and Creative Materials Association. However, the Balsa-Foam dust can be abrasive and can cause mechanical eye irritation if dust from this product gets in eyes. To help prevent this from happening, do not rub eyes when using and wash hands after use to remove any adherent particles. If you note eye irritation, flush your eyes with luke warm tap water. If irritation persists, see your physician. Use of safety goggles when sanding or using power tools can decrease the risk of particles getting into eyes."

As always; exercise common sense when using sharp tools.

## TIPS:

- Pits and other surface imperfections can be filled with plaster spackle or acrylic modeling paste sanded to a smooth finish. These can also be filled with Magic-Sculpt, Magic-Smooth, quick set epoxies or Bondo. The harder materials are recommended for final patching, as they can be harder to carve.
- Use hot glue to quickly adhere Balsa-Foam pieces together, epoxy or polyester adhesive is best long-term but keep in mind they may make hard seams to carve across.
- It is recommended to spray a layer of Krylon over the surface to seal it before painting the surface.

*Now What? Look for Foam Coating techniques and materials in later Project Sheets!*



Low relief carving made with Balsa-Foam

### Upcoming Project sheets:

Foam Coating Techniques  
Sculpting with Magic-Sculpt  
Using EX-88 Coating Epoxy

*Not necessarily  
in that order!*

Please email us at [TCS@SCULPT.com](mailto:TCS@SCULPT.com) if you have suggestions for Project Sheets you would like to see or questions or comments about our Project Sheets. If you have images of artworks you have created using our Project Sheets that we could post online, please email those as well!



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