

FUSED GLASS SERVING SPOON

Creative Paradise Inc.

Food Safety

Because spoons will normally come in contact with food of some kind, it is wise for us to begin by talking about the “Food Safe-ness” of most fusible glass. At Creative Paradise, we use System 96 glass in most of our projects. The following statement is available from Spectrum regarding the food safe status of fusible glass manufactured by Spectrum:

“Spectrum products have been tested for chemical leaching as required by the FDA for food bearing surfaces. All of our products passed and were determined to be suitable. However, when you use Spectrum glass to produce a product of your own (slump it, fuse it, foil it, lead it, etc.), it’s not Spectrum glass anymore. It’s your product now, and as such, must pass all tests before being sold or used as a food bearing surface. It is possible that the processes you use to make your product alter the composition of the raw materials (the glass) in such a way that they may no longer meet the required standards. Either way, the regulations are clear: You must have your own finished products tested and approved.

For more information about health and safety issues for food bearing surfaces you should contact The Society of Glass Ceramic Decorators, 888 17th Street NW, Suite 600, Washington, DC (202) 728-4132.”

This statement is from Uroboros Glass:

“An accredited testing lab performed ‘leachate tests’ which is a widely used standardized test to measure the rate of leaching of metals from glazes and glasses into an acidic solution, on a variety of our colors. All of our colors passed at that time. Despite the above, we recommend against positioning colored glass on any food contact surface. Best practice is to place a clear layer, whether it be sheet or a fused layer of clear frit, on the food contact surface.”

And the following statement can be found on Bullseye’s website:

“Listed below (find list at <http://www.bullseyeglass.com/is-bullseye-glass-food-safe.html>) are the Bullseye glasses that contain more than 1.0% lead or more than 0.5% cadmium. If you use any of these styles for food-bearing objects, we recommend capping them with Bullseye clear glass. In our testing, we have found that clear-capping results in minimal lead and cadmium leaching -- well below FDA limits. In our testing, we have also found that transparent glasses leach lead/cadmium at levels below FDA limits, and much less than opalescent lead/cadmium-bearing glasses; so you may be able to use transparent lead/cadmium-bearing glasses without clear-capping.

Our testing, however, does not cover all glass styles or firing conditions, and it cannot be taken as a guarantee of food safety when using these glasses. If you sell food-bearing objects, it is your responsibility to have them tested, since lead/cadmium leaching can be affected by the specific processes to which the glass is subjected. A heavily textured surface, for example, has more total surface area and, therefore, more area from which lead/cadmium may be leached.

A local chemistry lab should be able to perform the necessary test for you, according to ASTM C738-94(2006) Standard Test Method for Lead and Cadmium Extracted from Glazed Ceramic Surfaces, for a relatively low fee of around \$30 to \$70 dollars per sample.”

At Creative Paradise, we recommend that you have food bearing finished ware products tested for food safety if you are planning to sell your wares to the public. In our office and homes we feel comfortable using the spoons as spoons to serve food. Designing your spoons with a clear glass surface up would be worth considering if you are using glass by Bullseye or Uroboros. We leave you to make your own decisions regarding food safety and fused glass plates, bowls, spoons and all food bearing vessels.



Image 1



Image 2

Materials Used

- [CPI Mold GM188](#)
- [ZYP Glass Separator Spray](#)
- Fusible Sheet Glass
- Glass Cutter
- Pattern provided in this tutorial



Image 3

Double Thickness

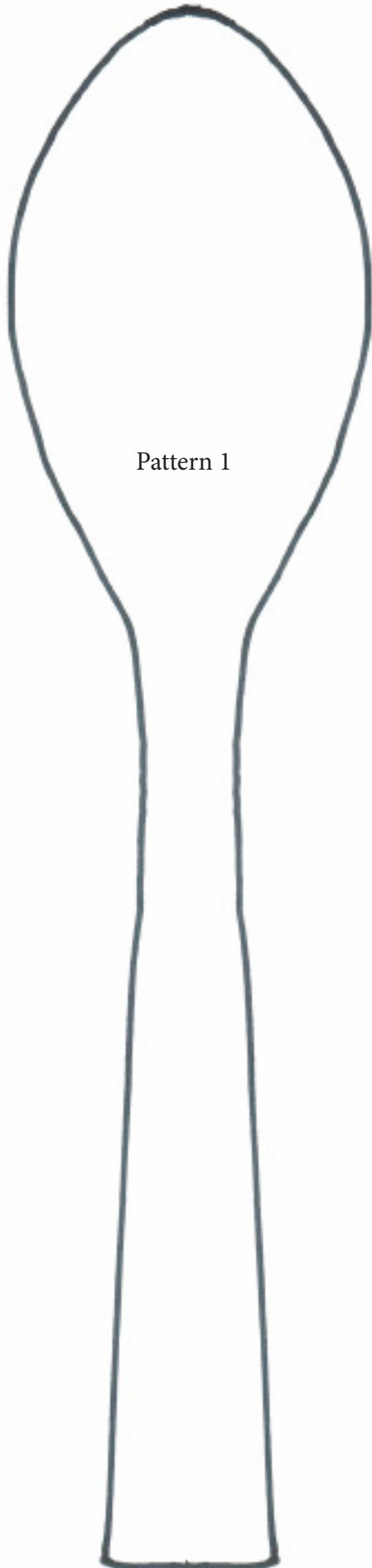
Serving spoon 2 and 3 were made by cutting two pieces of fusible glass using Pattern 1. The glass pieces were stacked onto each other on a piece of kiln shelf paper and taken to a full fuse in a kiln (a suggested firing schedule can be found in Table 1). After the glass was fused, the glass was placed on a GM188 Serving Spoon mold that had been treated with a quality glass separator. The top edge of the glass was placed 1/32" over the top rim of the bowl area of the slump mold and the shape was centered using the center lines on the top and bottom edges of the spoon. The project was slumped in the kiln using the firing schedule found in Table 2.



Image 4

Single Layer One Firing

The serving spoons found in Images 1 and 4 were made by cutting a sheet of fusible glass using the Pattern 1 and then adding small pieces of compatible fusible glass to the handle area. The unfused glass was placed on the GM188 Serving Spoon mold which was treated with Zyp Boron Nitride spray and fused and slumped in one firing using the firing schedule found in Table 3.



Pattern 1

As with all firing schedules, adjust the temperatures to suit the kiln that is being used. Please see our firing notes for more information about kiln firing variances and kiln testing. [Click here for more info.](#)

Table 1 Full Fuse			
Segment	Rate	Temp (F)	Hold
1	275	1215	30
2	50	1250	20
3	275	1465	05

Table 2 Slump			
Segment	Rate	Temp (F)	Hold
1	275	1215	30
2	50	1250	20
3	9999	950	60

Table 3 One and Done Firing Schedule			
Segment	Rate	Temp (F)	Hold
1	275	1215	45
2	50	1250	15
3	350	1435	05
4	9999	950	60

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