



# Sugar Showpiece Components



Dear Readers,

To the left is our objective, a beautiful sugar showpiece. This piece was created for a 3 hour educational Sugar-Demonstration at the World Pastry Forum. I designed this piece with education in mind as it allows me the opportunity to demonstrate various techniques and over the next several issues of Pastry & Baking Asia Pacific, I will be providing step-by-step analysis involved with creating each component of this piece. I am confident the techniques and tips shared in this department will provide you with the skills to not only create this sugar showpiece, but hopefully your own sugar masterpieces. Creating with sugar is my passion and I am very appreciative of this opportunity to share with you my skills and insight. I have been creating with sugar for over 2 decades and I continue to learn everyday. When it comes to sugar, don't be afraid to fail and always remember the only limitation placed upon creating with sugar are the boundaries of your own mind.

Culinary Regards,

*Ewald Notter*

**Publisher's Note:**

*Ewald Notter is considered a leading expert in modern day confectionery arts and is also well known as a competitor and teacher. A member of the United States National Team at the 2001 Coupe Du Monde de la Patisserie, Ewald scored 699 out of 700 points for sugar, thereby helping the US achieve its first Gold Medal in Lyon.*

# Introduction to Sugar

## Equipment Required for Sugar Boiling

**Cooking stove:** A strong gas stove or a strong induction oven.

**Pan:** To boil sugar on a gas stove, the copper pan will be the best. It conducts heat better than any other material. For induction oven make sure to use the right metal pan, since it doesn't conduct heat to copper or aluminum. The size of the pan is also very important. If the pan is too small, the flame comes up on the side of the pan and turns (caramelizes) the sugar yellow. The same will happen if you use a copper bowl with small amount of sugar in it.

**Whisk or spoon:** Necessary to stir the sugar at the beginning so the crystals dissolve easier.

**Brush and a Bowl of Water:** A wide and flat brush is needed to wash down the inside rim of the pan.

**Tea strainer or a Skimmer:** To remove impurities from the sugar syrup.

**Thermometer:** A mercury thermometer is more accurate and reads faster than an alcohol thermometer.

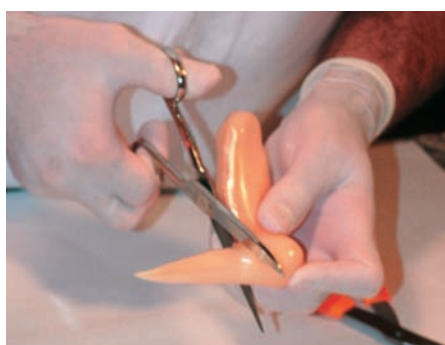
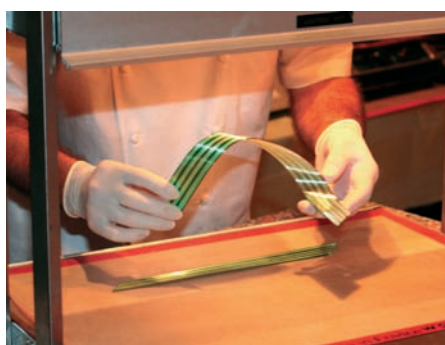
**Pipette Bottle or Dropper Bottle:** To be able to add the Tartaric acid drops by drop.

**Silicon Mat, Marble or Granite Slab:** Silicon mat is the most recommended surface to pour the hot sugar onto.

## Equipment Required for Pulling Sugar

**Warming case:** A warming case made out of Plexiglas with an infrared lamp to keep the sugar warm. Inside the Plexiglas case you will need a silicon mat to lay the sugar upon. A carving station will also work to keep the sugar warm.

**Scissors:** A pair of heavy duty, sharp scissors. Never keep the scissor under



lamp; the sugar will stick on warm scissors.

**Rubber gloves:** Latex examination gloves give the best protection for your hands.

**Hairdryer:** To cool the blown sugar pieces down use a hairdryer with a cold setting or fan.

**Alcohol Burner or Sterno Burner:** Regular small alcohol burner is recommended.

## Sugar Recipes (Depending on the availability of tartaric acid)

- (1) 1000g sugar  
400g water  
200g glucose  
10 drops tartaric acid

OR

- (2) 1000g sugar  
400g water  
2.5g (1/2 tsp) cream of tartar

### The boiling process:

1. Add cold water and sugar in a pan, dissolve slowly and heat to boil.
2. Before the sugar boils, impurities will rise to the surface. Take a sieve and remove impurities and wash down the inside rim of the pan with a flat brush dipped in cold water being careful to remove any crystals that may have formed.
3. Add the glucose and acid (or tartar) and remove any impurities again and keep the inside rim of the pan clean.
4. Boil the syrup quickly to 160°C. NOTE: If you have a bad quality of sugar, or a sugar which doesn't dissolve very well, you may boil sugar and water, clean it, add the glucose, bring it up to boil again, wash down the inside rim of the pan and cover the pan immediately with cling film. The cling film has to be tight around the pan otherwise crystals may form on the surface of the sugar syrup. Let the syrup rest over night.



**Pouring Sugar**

(I). Once the sugar has reached 160°C pour the sugar onto a silicon mat atop a piece of marble or granite. Marble or granite will cool the sugar faster. If you do not have a granite or marble slab, silicone mat atop a wooden table will work as well.

(II). The sugar will cool on the outside first, use your fingertips to fold the sugar from the outside to the inside as soon as possible. If you wait too long, the sugar gets too cold, hardens on the outside and will cause a hard broken piece in the sugar mass. It will appear later on like little crystal.



**The Importance of Air When Pulling Sugar**

(I). Without pulling air into the sugar, the sugar will look glassy.  
 (II). As soon as the sugar has stopped spreading you may start to pull the sugar. The more experience you have, the later you can start to pull the sugar. By pulling too early or overworking the sugar, the result may be dull sugar, lacking shine.  
 (III). Take the sugar in both hands, pull it apart and twist to entrap air, fold it together.

(IV). Pull with the palm of the right hand; fold it together and do the same to the other side with your right hand.  
 (V). Slowly, the sugar should become lighter and will develop a silky sheen. Once lighter stripes are visible you can begin to pull the sugar flat by laying strips next to each other without twisting it and cut them into small pieces.



**Storage**

Sugar will absorb humidity therefore it is important to store sugar in an airtight plastic bag or container with a hygroscopic drying agent. To reuse the sugar, you simply place the pieces on a silicone mat under a heating lamp, food warmer or low temperature oven.

...next issue, Sugar Flower