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**FAST SETTING MARSHMALLOW TYPE  
CONFECTION**

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10 Claims

**ABSTRACT OF THE DISCLOSURE**

A fast setting confectionery cream useful in preparing marshmallows, containing shortening, sugar, water, gelatin, flavoring and non-fat milk solids. The bulk density is comparable to slab marshmallow and requires no cooking.

**BACKGROUND OF THE INVENTION**

This invention relates to confectionary products of the character commonly known as marshmallow, and to the preparation thereof. In a more particular sense, this invention is directed to a fast setting marshmallow type confection and procedure for making the same.

In the commercial production of marshmallow the desired ingredients are mixed, aerated and cast in starch or deposited on a slab until the texture of the marshmallow sets. The setting time for a marshmallow may be as long as 12 hours. In one production method for a bar type product having a syrup-cereal base and a marshmallow layer on top, the marshmallow layer has to set before a slab of the product can be cut into individual bars. A second production method requires that the cereal-syrup base be cut to bar size and the marshmallow carefully deposited on each individual bar as it passes under a depositing head. These methods are not suitable for automatic equipment in which there is continuous sheeting and cutting of the cereal base into the bar shape. Such equipment requires a marshmallow type layer which can be placed on the cereal base and set in a couple of minutes instead of 3-12 hours. The entire operation to deposit the marshmallow and cut it into bar size and shape should be completed in a few minutes.

According to present commercial practice, in forming a slab marshmallow, the grain structure from the whipping agent supports the shape of the confection.

In forming the cast marshmallow, the sides of the cornstarch mold holds the confection in place until enough moisture has been removed from the outer portion to give the piece the ability to stand by itself.

A typical commercial formula for a gelatin slab marshmallow is as follows: 18 oz. granulated gelatin 175 bloom, 4 lb. cold water, 20 lb. granulated sugar, 6 lb. water, 8 lb. standardized invert sugar, 15 lb. corn syrup and 1 lb. sorbitol. Procedure: Mix gelatin and 4 lb. of water in container and set aside. Mix sugar in 6 lb. of water with the invert sugar, corn syrup and sorbitol in kettle and heat to 180° F. The gelatin-water mix is added to the heated syrup. The above mix is transferred to a marshmallow beater and beaten to the desired density. Marshmallows are generally beaten until 1 gallon weighs 4 pounds or a 0.48 gm./cc. density.

The conventional slab marshmallow can be used for casting. However, since the cast marshmallow must be pumped to and through a depositor, and it also loses moisture in the starch mold, a higher strength gelatin a smaller amount is used. A typical commercial marshmallow for casting is as follows: 2½ lb. gelatin 225 bloom, 12 lb. water, 60 lb. granulated sugar, 20 lb. water, 10 lb. stand-

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ardized invert sugar, 40 lb. corn syrup and 3 lb. sorbitol. Procedure: Mix gelatin and 12 lb. of water in a container and set aside. Mix sugar in 20 pounds of water with the invert sugar, corn syrup and sorbitol in kettle and heat to 180° F. Add water-gelatin mix to the heated syrup and transfer to marshmallow beater. Marshmallows are generally beaten until 1 gallon weighs 4 pounds or a 0.48 gm./cc. density. The temperature of the marshmallow for casting should be between 95° F. and 100° F. The hopper of the depositor should be about 100° F. when the marshmallow is added. The casting starch should be between 90° F. to 95° F. After the marshmallow is deposited in the dry starch it is covered with dry starch and held for approximately 12 hours. At the end of this time the finished marshmallows are separated from the starch by the use of a screen. When this marshmallow is deposited directly on, for example, a cookie and then enrobed, it must be stored for at least 48 hours at 72° F. to allow the deposited marshmallow to become firm.

**SUMMARY OF THE INVENTION**

Therefore, an object of the invention is to provide a fast setting marshmallow type of confection product and method of preparation thereof.

Another object of the invention is to formulate a marshmallow type confection that can be machined, cut and handled, within a couple of minutes of the time it was deposited on the base material.

A further object of the invention is to provide a marshmallow type product that can be pumped or spread within an hour of preparation if properly contained.

Further objects and advantages will appear in the course of the following description.

**DESCRIPTION OF THE PREFERRED  
EMBODIMENTS**

The conventional marshmallow is a low density confection that uses gelatin as the agent for incorporating and holding air in the product. If any fat is present in the preparation of this marshmallow it tends to inhibit the whipping properties of the gelatin. In the fast setting marshmallow type product according to the invention, the air is incorporated into the product by creaming the air into a sugar shortening cream mix. The dissolved gelatin is distributed through this cream without disturbing the air in the cellular structure of the cream mix. The gelatin sets on cooling to give the product its marshmallow type texture.

In the production of conventional marshmallow the initial moisture content of the marshmallow is kept high (28% to 30%) to insure a tender marshmallow. However, every effort is made to keep the dissolved solids at least 68% to retard the growth of micro-organisms. This marshmallow will lose moisture if stored at a relative humidity of less than 50%. In contrast, the moisture content of the fast setting marshmallow type confection is 19.0%. The fat in this confection tends to improve the handling qualities and the storage stability. If the fat were removed, the moisture content would be approximately 24%.

A formula was developed incorporating approximately 2% Grayslake Gelatin (low viscosity, pH 4.60, 249 bloom), and less powdered sugar. The product resulting from this formula, hereinafter particularly described in connection with specific examples, sets after approximately 2 minutes so that when it is cut, the pieces do not stick together on standing, and this product is not sticky.

The following specific examples will serve to illustrate the procedure and products of the present invention. All ingredients are referred to in parts by weight unless indicated otherwise.