

**Miracle II Soap Foam Bottles**  
**Miracleii.com (303) 593-0807**

**Soap Foam Bottles & Liquid Soap**

According to the manufacturer's information (which is somewhat scant) the bottles are designed to work with a thin liquid of **water-like consistency**. It must have sufficient surfactants (Miracle II Soap) to create the foam. The liquid should be water-based, and it must be able to foam using only normal air (no gasses or other propellants).

Miracle II Soap is a perfect product for foamy pump bottles. In fact, Miracle II Soap can be heavily diluted and still work well in the foamy pumps, which helps in overall product cost.

**Creams and Lotions**

As with a foaming soap, a "foamy lotion" must have surfactant(s) - something that will make foam **and** the rest of the ingredients must be of a water-like consistency. **Do not use our Miracle II Moisturizing Soap with this pump; it may clog the mesh screen.**

**Dilution Rate**

The goal in determining your dilution rate is to find the most you can dilute the product (and thereby reduce costs) and still have the desired feel of the foam. As a general guideline, you should be able to dilute your normal liquid soap by 2 - 4 times. Try using this procedure (KEEP RECORDS!!):

1. Put 1 Tablespoon (1 oz) of Miracle II Soap and 6 oz of water in a 7.5 oz foamy pump bottle.
2. Pump out some foam on a cookie sheet or plate. Did it pump easily? How does it look? Is it stiff?
3. Pump out some more and wash your hands with it. How does it feel?
4. Repeat steps 2 - 3 increasing the amount of Soap (1 teaspoon) each time. Keeping track of the results. Sooner or later you will notice the foam beginning to thicken out more than you want.
5. Look back through your notes and decide what dilution rate you want to use for your product. We recommend a 6-part water to 1 part Miracle II Soap. This makes it a 6 to 1 dilution rate.

**Usage and Care**

Use in the shower is not recommended and the bottles should not be placed or washed under running water.

Inside the pump of the Foamy Pump Bottle is a little mesh screen that mixes the soap with air to produce the foam. The holes are VERY small (79 microns), and can easily get clogged. The manufacturer does not recommend the addition of any solid particle, even if it is under 79 microns, as solid particles tend to clump together, making them too big to pass through the mesh. Micas and pigments are both too big to use in the foamy pump bottles.

**Troubleshooting**

If the pump stops working properly, check the following;

**Is the soap too thick?** The mixed liquid should be water-thin. If soap is too thick dilute the soap more.

**Is the screen clogged?** Empty the container, Remove top Spout, look under center spout, clean the screen and flush with warm water (it won't foam). May require a cue tip to clear mesh screen under spout.

**Is there liquid in the air chamber?** If so, turn it upside down and pump a few times which should get the water out. If that doesn't work (and if you are brave) take the pump apart, clean it completely, dry thoroughly and reassemble.

**Soap in the air chamber not good?** Clean as above. However, if the soap has had time to degrade the silicone in the pump, it may not regain the original amount of "spring back action".

The reason pumps can start sticking or stop working is caused by water getting into the air chamber and messing up the works. To keep the problem from happening, don't use or clean the pump under water or in running water as that can allow water to seep into the air chamber.

**Pump sticking?** The soap foam pump outside shaft may get dust & dirt around them causing them to stick and not "spring back". Clean outside pump shaft with hot water and dry off with a towel.