# Sampling Liquids and Semi-Solids



## Reduce the risk of contamination when taking cross-sectional samples of liquids and light creams

### Challenge:

Cross-sectional sampling tools have moving parts which can be hard to clean

## Application:

#### Cosmetics

Sampling a portion of a cosmetic product for blend uniformity and contaminants/ microorganisms is an important step to ensure high quality levels. Per the FDA, the ability of microorganisms to grow and reproduce in cosmetic products has been known for many years. Microorganisms may cause spoilage or chemical changes in cosmetic products and injury to the user.<sup>1</sup>

**Example:** Jonathan works in quality control of a cosmetic company sampling drums of finished goods, such as hand creams, to make sure they are free of contaminants. While cosmetic products are not expected to be aseptic, they must be completely free of high-virulence microbial pathogens, and the total number of aerobic microorganisms per gram must be low. The sampling process is carried out in a sterile environment to prevent introduction of contaminants.

Unfortunately, Jonathan's stainless steel, cross-sectional liquid sampling tool has moving parts and is hard to clean. Even when autoclaved, it could introduce contaminants resulting in loss of product and a financial impact. In this case, the stainless-steel tool he used had pathogens present after cleaning and autoclaving resulting in contamination of the hand cream. The batch had to be discarded.

#### Solution:

Sterileware® Cross-Sectional Liquid Samplers provide a simple solution for cross-sectional sampling of both liquids and creams. These single-use, disposable tools eliminate the risk of introducing contaminants from repeated use, ensuring consistent results. The liquid samplers are available in two convenient lengths, a shorter 450mm sampler for smaller containers as well as a longer, 1100mm sampler which is ideal for 55 gallons drums. All Sterileware® products are gamma-irradiated to a sterility assurance level (SAL) of 10-6 and come with a Certificate of Processing for sterilization.

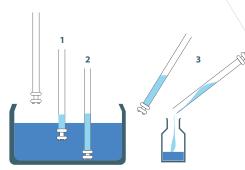
<sup>1</sup>BAM Chapter 23: Methods for Cosmetics | FDA





#### How it works:

- **1.** Place sampler into your container until it reaches the bottom.
- **2.** Press sampler against the container base to close the valve.
- 3. Remove sampler and pour out.





| Catalog No. | Capacity        | Length          | Outer<br>Diameter | Tip Hole<br>Diameter | Quantity/<br>Pack |
|-------------|-----------------|-----------------|-------------------|----------------------|-------------------|
| F37874-0450 | 80ml<br>(2¾oz)  | 45cm<br>(17¾")  | 2.1cm<br>(%")     | 6mm<br>(¼")          | 20                |
| F37874-1100 | 225ml<br>(7%oz) | 110cm<br>(43¼") | 2.1cm<br>(%")     | 6mm<br>(¼")          | 20                |