Preparation of cosmetic samples for microbiological analysis: good practice for a correct mixing

Introduction

Homogeneous mixing of various types of cosmetic samples with the MULTI-TX5 Digital.

In case of analysis of cosmetic samples to research microorganism like bacteria and moulds, it is necessary to analyze the cosmetic products during all the production process. This means that the samples being analyzed may always have a different appearance and consistency.

In order to perform a correct analysis, it is important to evaluate the product to be analyzed, considering the weight of the sample and how to mix it properly into a homogeneous solution with a culture broth.

Type of samples analyzed:

- Powder and dry pods
- Foundation and mascara

Procedure for the analysis

Powder and dry pods

1. Weigh the sample in a small jar on a technical balance, around 1 gram.
2. Dilute sample 1:10 with the culture broth.
3. Mix it with the MULTI-TX5 Digital for the correct homogenization (around 10 seconds).
4. The sample is ready to be dispensed in a Petri dish, and to be plated with a selective broth.

Foundation, mascara and wet pods

1. Weigh the sample in a small jar on a technical balance, around 1 gram.
2. Weigh the same weight of detergent (Tween 80) for an easier mixing of the product.
3. Mix it with the MULTI-TX5 Digital for 10 seconds to enable the mixing of the sample with the detergent.
4. Dilute sample 1:9 with the culture broth.
5. Mix it with the MULTI-TX5 Digital for the correct homogenization (around 15 seconds).
6. The sample is ready to be dispensed in a Petri dish, and to be plated with a selective broth.

Conclusion

The **MULTI-TX5 Digital** is the reliable solution for mixing various types of samples, including cosmetic products that require a homogeneous solution for a correct analysis.

The main advantages of MULTI-TX5 Digital are:

- High sample throughput processing as it mixes several samples simultaneously
- Various types of test tubes are supported thanks to interchangeable foam racks
- Different mixing modes available based on the type of sample and application
- Several advanced features optimize unattended operation