

BacTrac 4300 and RiboFlow[®]

Personal Care Products and Cosmetics



DETECTION OF MICROBIAL CONTAMINANTS IN 1 GRAM OF PRODUCT

Numerous cosmetic and personal care products are vulnerable to microbial contamination because of their ingredients. In all the most varied product groups – from shower gels to hair colors to facial creams - risks occur because of possible contamination of the product. Thus, for manufacturers of cosmetics, there is good reason not to lose track of guaranteeing microbiological quality. In accordance with Regulation (EU) 1223/2009 with mandatory implementation beginning in July 2013, cosmetics must be safe for all foreseeable applications. This well includes microbiological safety.

The EN ISO 17516 standard establishes microbiological limits for cosmetics. In addition to the basic prerequisites of hygienic production, such manufactured cosmetics must neither exceed defined quantities of microorganisms nor contain specified microorganisms that have the potential of compromising product quality.

By taking appropriate hygienic measures in production and/or by the addition of preservatives, many products fall well below the permitted upper boundary limits for the total viable aerobic mesophilic plate count. At the same time for the big majority of products, no microbial contamination is detected when examining 1 gram of product.

By using SY-LAB's impedance technology, a simple and very quick screening system is available for investigating 1 gram specimens of cosmetic and personal care products.

With the BacTrac impedance system, all microorganisms capable of replication are safely detected. At the same time, the measurement signals remain unaffected by the different complex matrices of cosmetic products.

ROBUST TECHNOLOGY

Neither the product consistency, the coloration of the sample nor the addition of particular components produce an effect on the measurement. Preservatives are deactivated by the neutralizers present in the enrichment media.

The samples can be processed in parallel or sequentially. By examining 1 gram of product directly, products with negative results from the impedance screening are instantaneously released since these products are then also free of the 4 specified microorganisms. Reactive samples can be investigated using the RiboFlow[®] biomolecular Lateral-Flow technology for the presence of the specified microorganisms *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Escherichia coli* and *Candida albicans*.

This automated cultural procedure profits from simplification in execution and evaluation. Together with the new RiboFlow[®] technology, fast and sure verification of microbial pollution as well as the absence of the microorganisms specified in ISO 17516 becomes possible, also without comprehensive microbiological expertise.

APPROVED – SIMPLE – FAST – RELIABLE

The SY-LAB impedance technology has been in use worldwide for more than 25 years, delivering millions of individual results in a variety of applications and testing laboratories.

The size of the system is scalable, depending on the requirements, from 64 up to several hundred tests per day.

Sensitivity:

Bacteria and Yeasts:
> 1/g results in 28-48 hrs

Moulds:
> 1000/g results in max. 72 hrs.

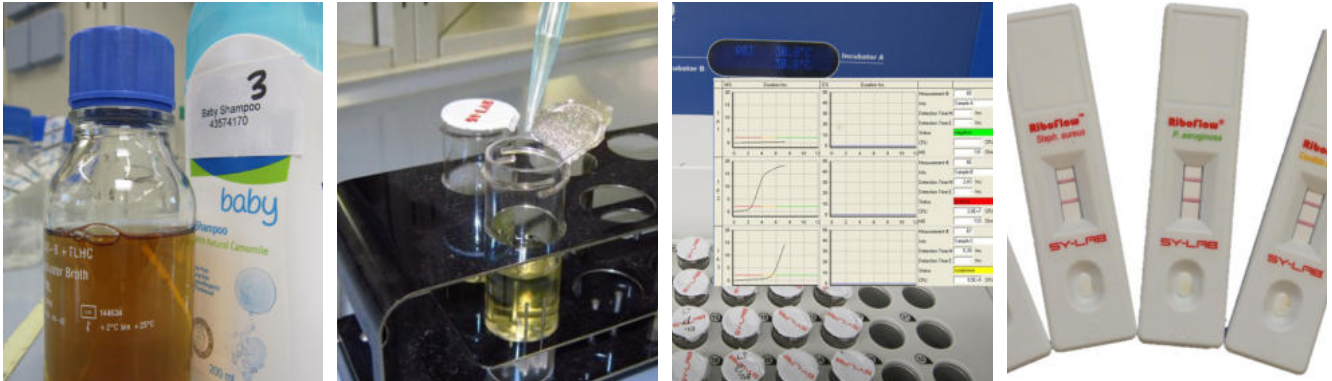
Matrices:

Toiletries, cosmetic products (solid or liquid), hair care products (incl. dyes)

Your advantages:

- Rapid results
- Simple testing
- Automated documentation
- Earlier product release

WORKFLOW



Enrichment of 1 g sample in nutrient broth including inactivator (24 hrs.)

Transfer of 1 ml enriched sample to a BacTrac measuring cell

Investigation using BacTrac with automated documentation of results

BacTrac reactive samples will be tested with RiboFlow® Cosmetics for absence of specified microbes (30 min)

CONSUMABLES

- 41-440011 BacTrac vials with ready to use BiMedia 001C, 120 tests per box
- 41-430012+ (option) Screw caps, sterile, 40 pcs per pack
- 51-420113 RiboFlow® Cosmetics, 4 x 6 Tests for 4 specified microbes

alternatively:

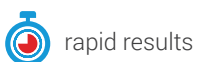
- 51-421113 RiboFlow® Pseudomonas aeruginosa 24 Tests per pack
- 51-422113 RiboFlow® Escherichia coli, 24 Tests per pack
- 51-423113 RiboFlow® Candida albicans, 24 Tests per pack
- 51-417113 RiboFlow® Staphylococcus aureus, 24 Tests per pack

Economic aspects:

- Reduction of storage space and costs
- Reduction of quarantine storage time
- Improved utilization of production facilities
- Increased productivity
- Reduced risk
- High cost savings

Technical support:

- On-site training and technical support
- Specific application protocols
- Validation support
- IQ/OQ documentation
- Remote maintenance and maintenance contracts



rapid results



earlier product release



simple testing



simple documentation