

Short description of the PT-scheme: aerobic total count in O/W-emulsion

It was decided by the Working Group of the Laboratory Committee for Inter-laboratory Comparisons of the European co-operation for Accreditation (EA LC WG ILC) in the 22th meeting held on the 02/03 October 2014 in Kopenhagen, that the following PT-scheme:

Aerobic total count in O/W-emulsion (cosmetics)

should be used to assess the comparability of the laboratories of the EA members.

Reflecting the great importance of microbiology in the cosmetic sector the DRRR developed an extensive program as part of an effective product quality assurance, product safety and consumer health. The program includes both enumeration of mesophilic microorganisms (e.g. aerobic total count, moulds) and the detection of specified microorganism like skin pathogens such as *S.aureus*, *P.aeruginosa* and *C.albicans*.

With the DRRR proficiency testing scheme for aerobic total count in O/W-emulsion a laboratory gets an objective and independent impression of its quality and performance of its routine testing method compared to the other participating laboratories. The results of this PT scheme can be used to increase the laboratories performance in the cosmetic field initiating corrective actions.

The participating laboratories will receive a sample set consisting of 2 cosmetic samples à 10g O/W-emulsion. Both samples should be analyzed for "aerobic total count" in double determination. The analysis can be carried out by the laboratories method of choice.

For the evaluation all "real values" will be transferred to Log10-values (Log10 normal distribution) and the sensible statistics with outlier elimination will be used. According to the DIN EN ISO/IEC 17043:2010 the participating laboratories are evaluated by means of the z'-score.

The figure below shows the graphical presentation of the evaluation from the proficiency testing aerobic total count in O/W-emulsion (RVEP 13397) in 2013.

