

Programme of DRRR-Proficiency testing 2013 for EA

Short description of the PT-scheme: Global migration in plastic foil

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 18th meeting held on the 25/26 September 2012 in Warsaw, that the following PT-scheme:

Global migration in plastic foil

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

Reflecting the great importance of packaging material in the field of food the DRRR developed an extensive program as part of an effective quality assurance. The program focuses on migration testing of different plastic films: global migration as well as specific migration of different substances which are of great importance for the packaging industry can be offered.

With our proficiency testing scheme for global migration 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 trial can be used to increase the laboratories performance in the field of migration testing by initiating corrective actions.

In the proficiency testing global migration in plastic foil we offer to analyze the global migration in the following simulating matrices (acc. to Commission Regulation 10/2011): ethanol 10%, 20%, 50%, acetic acid 3% and vegetable oil.

The participating laboratories receive a sample set with five samples of plastic foil: one sample for the analysis of the global migration with each of the five food simulating matrices. Our participants are free to analyze the global migration in all the simulating matrices or only in a few of the mentioned simulating matrices. The analysis can be carried out by the laboratories method of choice.

For the evaluation the following four statistical methods are used: Sensible statistics, Sensible statistics with outlier elimination, Robust statistics (Hampel-estimator, Q-method), Robust statistics (Median, MAD). This is because an ideal statistical scheme does not exist. For the determination of the best estimate for the true value the statistical model with the lowest χ^2 -value is used. According to the DIN EN ISO/IEC 17043:2010 the panels are evaluated by means of the z' -score.

The figure below shows the graphical presentation of the evaluation from the proficiency testing global migration (RVEP 11231) in the food simulating matrix ethanol 10 %.

