

### **Patent in the USA for Premi<sup>®</sup>Test and Delvotest<sup>®</sup>**

On the 9<sup>th</sup> of December a DSM patent has been granted in the USA! In this patent a new one-step method has been described which can be used to detect antibiotic residues in samples which contain disturbing compounds such as naturally inhibiting compounds (e.g. lysozyme in eggs) or natural pigments (e.g. blood).

DSM Biotechnology Center (DBC) in Delft found that inhibiting compounds such as lysozyme, can be inactivated by treating the samples with a pre-heating step of 10 minutes at 80°C; the antibiotic residues are not inactivated by this treatment.

The picture shows the Premi<sup>®</sup>Test 2 Step incubator; the customer simply brings the sample onto the agar medium of the test; the test ampoule containing the sample gets a pre-heat treatment after which the normal incubation at 64°C starts so no extra handling for our customers. This method can be used for examining samples such as e.g. egg, urine, kidney, feed and raw milk samples which contain high concentrations of natural inhibiting compounds.

The patent also protects the use of thickening agents which can be added to “dirty” samples, e.g. samples containing blood. After adding the thickening agent to the sample, the sample is added onto the agar matrix of the test. The thickening agent forms a matrix, which prevents diffusion of the natural pigments present in the sample into the agar. If such should occur, the agar turns brown and cannot be read anymore. Now, the colours are bright yellow or purple and thus the results of the test are easy to judge.

With both methods the Premi<sup>®</sup>Test can now be used for samples, which could not be examined before for the presence of antibiotic residues due to false positive results. This will affect results in self monitoring programs on food safety in the food processing industry. DSM Nutritional Products (NBD-Animal Nutritional & Health) has a project with a focus on food safety in the food chain with products such as the Premi<sup>®</sup>Test.

More information can be found at: [www.premitest.com](http://www.premitest.com)