



## Press release

# MIGRESIVES: Migration from adhesives into food packaging materials – Successful Closing Conference in Ljubljana

The MIGRESIVES project consortium had presented and discussed the results of more than 3 years of research work at the closing conference on 27 and 28 April in Ljubljana. 150 participants from all over Europe, USA, Japan and Saudi Arabia joined the conference.

MIGRESIVES is a European research project (COLL-CT-2006-030309) within the 6th EU Framework Collective Research Programme in support of small and medium size enterprises. It was the intention of the MIGRESIVES project to develop a pragmatic, science based test concept to ensure the safety-in-use of adhesives used in food contact materials. Adhesives formulations are often very complex and contain numerous single components.

The presentation of the project work and results was set into the frame of the expectations towards the project and implications of the outcome to the legislator, the adhesive SMEs and associations as well as all other stakeholders especially the packaging converters, food industry, surveillance laboratories and the food safety authorities. In the introductory session Dr. Annette Schäfer from the European Commission, DG Sanco pointed out the food regulatory situation of adhesives in food contact materials and her expectations towards the project. The main part of the first day was the scientific presentation of the project outcome performed by the R&D partners Fraunhofer IVV, FABES, INRA, University of Zaragoza and CTCPA: analytical methods for screening and determination of adhesive substances in the materials and the migration, systematic migration and partitioning studies in order to derive parameters for the prediction of migration, the evaluation of the data and the mathematical modelling. From the experiments more than 1200 migration and diffusion and partition coefficients have been derived at different temperatures and in different materials. These are the main parameters for the prediction of migration via mathematical modelling. From these data a general estimation of the diffusion coefficients in acrylic, vinylic and rubber adhesives as well as in plastics, paper and board could be derived. Partition coefficients were obtained for 39 substances in 224 conditions. These can be directly used for the migration prediction. For additional substances, reference partition coefficients were proposed for the groups of polar, medium polar and non-polar substances. These tools are embedded into a testing concept and a decision tree which will be published as guidelines. The use of the tools and the application of the decision tree were presented on the second day, as well as the multilayer modelling software developed by INRA which will be shortly available from the MIGRESIVES website ([www.migresives.eu](http://www.migresives.eu)). Furthermore training lessons have been worked out by ITECH to teach and understand the food regulatory requirements,

diffusion and migration processes, use of the Migresives tools and the software. A feasibility study for a complementary approach was presented by the University of Burgundy using bioassays.

The applicability of mathematical modelling to adhesive layers, to paper and board for prediction of migration into food and simulants met high interest in the conference and further applications e.g. in printing layers are envisaged. Thus the MIGRESIVES project provided cost saving tools for the adhesive producer, to explore conformity related to various applications e.g. during product development, conformity evaluation of existing products (supporting documents), for the packaging producer/converter and food industry to calculate migration and evaluate conformity for the given application.

For more information please go to: [www.migresivesclosingconference2010.eu](http://www.migresivesclosingconference2010.eu) and [www.migresives.eu/](http://www.migresives.eu/)

The project proceedings can be obtained by FEICA ([info@feica.eu](mailto:info@feica.eu), 100 Euro)

Project coordination: Dr. Angela Störmer, Fraunhofer Institute for Process Engineering and Packaging IVV, 85354 Freising, Germany, [angela.stoermer@ivv.fraunhofer.de](mailto:angela.stoermer@ivv.fraunhofer.de) .



Speakers