EuPIA, the European Printing Ink Association working under the umbrella of CEPE, represents and protects the common interests of the European printing ink business and promotes the image of the industry to the public. EuPIA provides a forum for discussion and decision-making regarding issues of specific interest to the printing ink industry. EuPIA members also participate in CEPE working groups dealing with issues of general interest to the wider CEPE membership.

**Market Statistics 2010**

EuPIA publishes market statistics on an annual basis. The data can be accessed via the EuPIA website at www.euapia.org, section Statistics.

The aggregated figures displayed in the charts below summarize:

- Value per country total, per category Europe and Europe total
- Volume per category for Europe total

The figures comprise domestic ink data collected for 27 countries or country groupings in Western and Eastern Europe and represent the activity of 19 EuPIA members participating in the statistics.

It is believed that this represents overall in excess of 90% of the total European market.

The global ink categories for which the aggregated figures are displayed are defined as follows:

- Liquid inks, water borne (includes inks, technological varnishes, extenders, primers, and overprint varnishes)
- Liquid inks, solvent borne (includes flexo, gravure, publication gravure inks, technological varnishes, extenders, primers, and overprint varnishes)
- Oil based inks (includes coldset and heatset offset as well as conventional sheetfed offset inks)
- All other inks

**Ink Market Statistics: Key data per country – sales value, and Total Europe – value and volume**

[Graph showing ink market statistics per country and total Europe]
“More than one challenge”

Europe’s printing ink industry sees overall growth, but number of regulations increases

“What is the biggest single challenge for the printing ink industry?”, Dr Dirk Aulbert, Chairman of the European Printing Ink Association (EuPIA), asked on 31 March, right at the beginning of the two-day Annual Conference 2011 in Vienna/Austria. None of the nearly 90 participants seemed to be surprised when the Chairman stated that there was more than one answer to this question.

Describing the multiple challenges that the European printing ink manufacturers are currently confronted with, Dr Aulbert stated that there was indeed more than one issue to be dealt with.

HIGH EXPECTATIONS & ONGOING RECOVERY
Apart from high expectations from the part of governments and consumers, some parts of the printing inks industry have still not recovered fully from the crisis. While the demand for packaging applications has picked up, with some product lines even reaching pre-crisis levels, the situation looks completely different for printing inks used for the production of newspapers. Complete recovery in this segment is still uncertain, said Dr Aulbert. Up to two-digit price increases for indispensable raw materials make the situation even worse.

These currently most pressing issues were consequently reflected by the majority of presentations and discussions. The printing ink industry has in parts reacted to these challenging conditions with far-reaching measures like cutting capacities or even restructuring.

OVERALL INCREASES
Despite the various hurdles which the industry has had to overcome: In the year 2010 sales figures increased for about 70 % of the printing ink product lines.

Overall the printing ink manufacturers within EuPIA increased their sales volumes in 2010 on average by 3.6% (in t) compared to the previous year. With 3.2% of growth, the positive development of the corresponding value figure slightly lagged behind, (both figures excluding export), as Martin Cellierer, Chairman of EuPIA’s Statistics Working Group, explained in his detailed presentation on the market development. Altogether the volume reached 1.13 million tons, with the value amounting to EUR 3.43 billion in 2010 (incl.export). Of the overall printing inks sales volume, liquid products represent 29 %.

In spite of these positive figures there have also been signs of decline in some countries like France and the Netherlands during the second half of 2010. The reason for this worrying development is not clear, yet. Furthermore, Martin Cellierer reported average price decreases of -0.3 % for printing inks in almost every market. The market expert also observed another new development, which is a beginning disconnection between the development of a country’s printing ink industry and its GDP.

RAW MATERIAL PRICES GO UP, AVAILABILITY DOWN
Like their colleagues in the paint and coatings industry, Europe’s printing ink manufacturers have to struggle with high raw material prices. According to EuPIA, the all-time high prices of oil and gum rosins have the biggest negative impact on this industry.

In the course of a vivid discussion about the insufficient availability of important raw materials, conference speaker Juan Antonio Merino, Commercial Vice President, Dow Europe, stated that looking at the future development of this issue it is likely that raw materials will not be available at the right time in the right place. “In my opinion, no company can afford it any more to invest in additional capacities, before the demand is clearly visible. We only invest if there is a return”, said Merino, explaining that today there was no flexibility any more to push costs backwards, but that instead they have to be pushed forward to the end user.

THOUGHT PROVOKING
In his invitation to Vienna, the EuPIA Chairman had promised a thought provoking conference. And he delivered. Two presentations and a panel discussion dedicated to print media raised a slight hope that in the end there may still be some future market for these products, although print media is often said to be obsolete and to be entirely substituted by its digital counterparts soon.

The complex issues around the use of food packaging inks were touched by Dr. Ute Galle-Hoffmann, German Federal Ministry of Food, Agriculture and Consumer Protection (BMELV) who explained the need for and contents of a regulation on food packaging inks from the perspective of the German competent authority. Regarding those aspects of her draft which are considered as being critical by the printing ink industry, the speaker seemed ready to discuss e.g. definitions and classifications as well as a guideline for additions to a whitelist. But when it came to other important aspects like the desire for a European directive instead of a national regulation and the classification of pigments as (according to the regulation forbidden) nano materials, parts of the audience would have liked to receive further clarification.

Miriam von Bardeleben
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ANNOUNCEMENT OF THE 9TH EuPIA ANNUAL CONFERENCE IN 2012

The next Annual Conference will be held on 15-16 March 2012 in Venice (Italy).

PRINTING INKS AND VARNISHES FOR FOOD PACKAGING

Food packaging must be manufactured such that it does not transfer its constituents to the packed foodstuffs in quantities which could endanger human health, cause an unacceptable change in the composition of the food or inadvertently affect foodstuffs in terms of odour and taste. These general requirements are laid down in the European Framework Regulation (EC) No. 1935/2004 on materials and articles intended to come into contact with food.

At present, on European level detailed legal provisions exist for packaging material made from plastics; as yet there is no specific legislation for other packaging materials, such as for example paper and board.

The GMP Regulation (EC) No. 2023/2006 lays down rules on good manufacturing practice for materials and articles intended to come into contact with food. It specifies that quality assurance and control systems are to be established and implemented.

As with non-plastic packaging material, there is not yet any specific EU legislation concerning printing inks and varnishes for food packaging. In the current situation, EuPIA provides assistance to its member companies to enable them to contribute their respective share to the legal compliance of the final packaging. The documents are available on the EuPIA public website at www.eupia.org, section Publications.

SWISS ORDINANCE ON MATERIALS AND ARTICLES: PROVISIONS FOR FOOD PACKAGING INKS

Switzerland – as the first country in the world – had amended its Ordinance on Materials and Articles (SR 817.023.21) with provisions specific to food packaging inks. The core element of the new regulation is a list of "permitted substances", identifying the only substances which may be used in the manufacture of food packaging inks marketed in Switzerland. This list, which has been established with the support of EuPIA, became applicable as from 1 April 2010. A revised list was published in February 2011 and came into force in May 2011 (http://www.bag.admin.ch/themen/lebensmittel/04867/10015/index.html?lang=en).

The Swiss competent authority takes a pragmatic approach with regard to the enforcement of the Ordinance: substances, for example, which are not included in the official lists may be used, provided that a substance dossier containing the required data has been submitted to the authority, and the notifier has received confirmation of receipt of the dossier.

As this piece of legislation is quite complex and can be prone to misinterpretation, EuPIA provides guidance documents in a dedicated section of its public website. In particular, a FAQ document, published jointly by the Swiss Federal Office of Public Health and EuPIA, addresses relevant issues regarding substance evaluation and detection limits.

GERMANY FOLLOWS SUIT

The German Consumer Protection Ministry presented a first draft of an amendment to the German Ordinance on Materials and Articles, introducing printing ink-specific provisions similar to those in Switzerland at first glance, but quite different on closer examination.

An immediate concern is the incomplete draft positive list: a number of substances which are essential in the manufacture of food packaging inks are missing from this list. EuPIA closely cooperates with the relevant trade associations of the raw material industry to fill potential data gaps such that the missing substances can be included in the list.

As currently there is no evidence that EU Commission is willing to take over the initiative, EuPIA and the entire food packaging chain are deeply concerned about the risk of different ink legislation being developed in EU Member States, resulting in a patchwork of requirements and obligations which neither the ink industry nor the raw material supply and converting industries will be able to cope with.

FOOD PACKAGING MADE FROM RECYCLED PAPER AND BOARD

Recent monitoring of packaging on the German market has identified mineral oil contamination in a range of
packaged foods. Mineral oils are widely used, and end up in foodstuffs by various routes which are being explored.

Food packaging has been identified as one source of the contamination in the foodstuffs. For instance, mineral oil can migrate from recycled paper and board, and from mineral oil-based print on the non-food contact side of packaging.

The German Federal Ministry of Food, Agriculture and Consumer Protection (BMELV) requires the food packaging chain to take measures such that levels of mineral oil in foodstuffs are reduced.

In this respect, the trade associations representing the German paper converting industries (WPV) have recommended to their members to only use mineral oil-free printing inks on paper and board packaging. Additionally, the German Federation for Food Law and Food Science (BLL) has recommended to the food industry - besides other measures - the use of specific printing inks:

• for food packaging: printing ink systems, which have been optimized for migration
• for all other packaging: mineral oil free printing inks

To enable printers and converters to meet their respective industry association’s commitment to the BMELV, EuPIA identified appropriate packaging ink options in the information note “Printing ink industry contribution to German paper, paper converting and food industry initiatives to reduce mineral oil in paper and board packaging” (www.eupia.org).

The recycled paper or board itself must be considered as a main source of mineral oil: the waste paper from which it is made currently contains a significant proportion of used newspapers. News inks use mineral oils as an important part of the formulation, which upon printing are absorbed by the newspaper (this is how printed news inks dry). Thus mineral oils may come into direct contact with foodstuffs as substances contained within the recycled paper and board, unless the packaging is designed such that transfer of the mineral oil is avoided.

This observation is not new, and therefore the ink industry has long advised caution when using recycled paper and board as food packaging (see EuPIA information note: “Recyclability of printed paper and board articles for use in primary food packaging”).

News inks, as any other publication inks, are safe for their intended purpose. However, they are not designed to come into contact with food, neither directly nor indirectly. Therefore appropriate measures must be taken by the paper recycling industry and the packaging industry that avoid the transfer of mineral oils or other components of the packaging into food beyond acceptable limits.

Nonetheless, recently some expert audiences and media have been demanding that the mineral oils contained in news inks should be substituted by vegetable oils.

Mineral oil free news inks are in principle feasible, but not currently available due to lack of market demand. Historically, some alternatives based on vegetable oils were placed on the market, but they were deemed to be economically unsatisfactory and thus not fully qualified technically. Before such replacements become viable, a number of print characteristics will have to be optimised during ink development and press trials.

However, such potential investments which would in any case involve higher costs are only justified when reliable regulatory conditions are set by the legislators. These conditions relate to accepted limit values for the migration of substances from paper and board packaging into food, and must be determined not only for mineral oils but for any other migratable substances which have not been evaluated according to food safety standards, but which are likely to be present in recycled paper and board.

Very recently, Germany has presented a first draft of an amendment to the Ordinance of Materials and Articles, aimed at solving the “mineral oil issue” by setting limit values for the transfer of mineral oils from the recycled material into food. Despite a number of deficiencies contained in the current draft, EuPIA in principle welcomes this initiative as a first step towards a comprehensive regulation for non-plastic food contact materials.

**EuPIA Technical Committee**

Global issues and non-food printing ink applications are addressed in the EuPIA Technical Committee (ETC) and its associated working groups. For example, in recent months the committee has endorsed the position of its Labelling and Safety Data Sheet (LSDS) working group on the CLP re-classification timetable for printing inks, and its plans to develop examples for typical ink systems in support of CEPE’s new exposure scenario guidance.
documents (see separate article in this Annual Report on hazard communication under CLP and REACH).

The EuPIA Exclusion List for Printing Inks and Related Products represents a voluntary commitment to exclusion of certain hazardous raw materials from members’ products. In 2011 ETC has published an updated edition of this document, clarifying the exclusion criteria and also the procedure for substitution of a material which becomes newly subject to those criteria.

The Exclusion List is an important tool for meeting safety responsibilities in a number of applications, not least in the printing and decoration of toys where the safety of children is naturally of paramount importance. This commitment is supported by a statement/model letter on printing inks for toys, developed by ETC for proactive or reactive use by members as required.

Environmental considerations and sustainability are a key part of the agenda of ETC. The committee published an information note on the carbon footprint of printing inks (available on the EuPIA public website), and a more comprehensive brochure on the environmental impacts of inks has been developed in 2011. The committee also participates in CEPE’s project on sustainability (see separate article), specifying typical raw materials, printing ink formulations and manufacturing processes to be characterised in the life cycle database. This vital foundation will inform and support future sector-specific activities on sustainability.

EuPIA welcomes any initiative aimed at enhancing the recycling of recovered paper and continues to be an active member of the European Recovered Paper Council (ERPC). EuPIA supports the “European Declaration on Paper Recycling”, a voluntary cross-industry commitment to a sustainable increase in paper recycling, and has recently participated in the development of the new declaration for 2011-2015. EuPIA has co-developed and supports a number of ERPC guidance documents, accessible via the ERPC website at www.paperrecovery.org.

**OPERATIONAL SAFETY AND RISK ASSESSMENT**

The objective of the Operational Safety and Risk Assessment (OSRA) working group is to support member companies of EuPIA and CEPE, in particular SMEs, but also customers/printers/applicators in operating at the highest possible level of plant and occupational safety. OSRA’s output comprises guidelines and information, both for ink/coatings manufacturers and for printers or industrial coating applicators, of the following different types:

- **Safety Flashes (urgent information) and Safety Alerts**
  OSRA publishes a number of alerts and/or flashes each year to highlight significant incidents or risks and to share key learning and action points for members. Topics are varied, and this year have regrettably included some fatalities both within and outside our own industry.

- **Safety guidelines for ink/coating manufacturers**
  The existing library of guidance documents has this year been supplemented with a new guideline on safe opening of fumigated sea containers. Further guidelines are in preparation on mixer safety, prompted by recent Safety Alerts, and on raw material change management.

The above documents are for use by EuPIA/CEPE members and are all available on the EuPIA extranet (members’ area of www.eupia.org).

- **Safety guidelines for customers/users (printers, coaters)**
  These are available on the EuPIA/CEPE public website. The guideline on safe use of cellulose nitrate printing inks was updated in 2010, and the guideline on energy curing printing inks and varnishes is being revised for re-publication later in 2011.

OSRA also co-operates closely with raw material suppliers’ associations to improve safety in the supply chain, e.g. by co-developing or endorsing guidelines on use of appropriate packaging for hazardous materials.

**NEW COMMUNICATION DOCUMENTS**

EuPIA has published two new documents, describing the true value of printing inks including their social and economic value. Also, some fundamental information is provided regarding the complex variety of printing inks for the many types of application. These documents can be downloaded from the EuPIA website. Also, hard copies can be obtained from the EuPIA secretariat.