

ANNUAL REPORT 2017

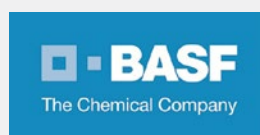
CEPE



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DEAR READER,

When in July the meetings season becomes slow for the CEPE staff it is time to write the articles for CEPE's annual report. Although working against a deadline gives some pressure it is at the same time for all of us who write their contribution an encouragement to see how much has been done in the year past. On average the CEPE staff organizes anywhere between 80 to 100 meetings per year and through the constructive involvement of the participants in those meetings we are able to report the progress as laid down in this annual report.

'Staying aligned', association staff members met in Berlin

Although this annual report is issued by CEPE it in no way should convey that CEPE is the only association that works on the topics as described here.

Once every two years the staff members of nearly every association meet to discuss and align their messages and activities on EU issues. Some 40 attendants gathered on May 11 and 12 in Berlin where they discussed and brainstormed on the 'lobbying roadmap'. All realizing that we can only be successful if we bring the same message.

Legislative matters

Handling these EU issues for our members is one of the main reasons for CEPE's existence. No wonder that this annual report is mainly made up with these topics. With many authorities nowadays **evaluating dossiers of substances or biocides** our industry has to constantly be on the alert when this relates to the ingredients we use for the manufacture of our products. Most often in small time windows we have to respond to questions on use and handling in our industry.

TiO₂, the dust certainly has not yet settled

TiO₂, this topic has for obvious reasons attracted a lot of attention at CEPE and the National Associations. And we foresee that it will continue for the rest of 2017 and the better part of 2018.

The Risk Assessment Committee (RAC) of the European Chemicals Agency announced that they recommended to classify TiO₂ as a category 2 carcinogen by inhalation.

CEPE is at this moment challenging the EU authorities if CLP is the right instrument to risk assess non-toxic dusts like TiO₂. We also will

point out in our discussions with the authorities that when the dust is no longer available there is no need to warn the user for a hazard he cannot be exposed to.

Sustainability in the paint and ink industry

The pilot project facilitated by the EU Commission called Product Environmental Footprint (PEF) for Decorative paints will finish by December 2017. Where after a discussion has to take place on how to incorporate its outcomes into the market.

The sectors of coil coatings and printing inks ran each a LCA screening study this year.

Education

'Attracting the next generation of paint or ink chemists' remains point of attention. The English Master Programme at ITECH, Lyon, continues to draw more students every year but we are low on non-French students.

Brexit

At this moment the discussions on break up and renewed relations are ongoing. Our members of the BCF participated in a survey of the chemical industry. Their main concerns with Brexit:

- » Higher costs for their business with the continent
- » 76 % see Brexit as a risk
- » A large majority expressed that potential additional UK chemical legislation on top of REACH should be avoided

By next year this time we will have more clarity on how well the British negotiators have listened to these concerns.

Enjoy reading this year's report

Jan van der Meulen
Managing Director CEPE

PHOTOS

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REASON TO ACT

CEPE is an industry association that offers the legal platform for its members to meet and to discuss industry issues.

The typical issues that require a collective industry approach, often originate from areas such as:

- » Upcoming or existing legislation on safety, health and the environment (chemicals, emissions, labelling, transport etc.)
- » Unsatisfactory situations in the industry concerning the position or the image of the whole sector.

Efforts that are undertaken can be reactive or pro-active to these issues.

The benefits from the collective efforts are meant for those that have joined the CEPE membership.

THE INDUSTRY TO SPEAK UP

To deliver „One message“

CEPE or EuPIA represent the interests of its members at:

» the EU Commission or Parliament or the delegated EU institutes.

» the EU industry associations that are relevant for the supply chain.

» the UN (directly or via its membership in the International Paint and Printing Ink Council -IPPIC). ↻

CEPE FUNCTIONS AND ASSIGNED WORKING GROUPS

CEPE FUNCTION



ALERT

- » Monitoring upcoming issues (radar for industry)
- » Advising for issue - treatment

BUILD

- » Preparation of proposals and positions
- » Consultation of members not participating in WG

DELIVER

- » Propagation and feed back on positions

ADDRESSED PER CEPE WORKING GROUPS



- » SHE Advisory Board (SHEAB) SHE topics (approx. 25)
- » Substance Risk Assessment Group evaluating substances of concern

- » Issue related Task Force in case of industry wide issues
- » EU Sector Group when sector specific action is required

- » Platforms of Directors or staff members of NAs + CEPE

SUSTAINABILITY



PRODUCT ENVIRONMENTAL FOOTPRINT

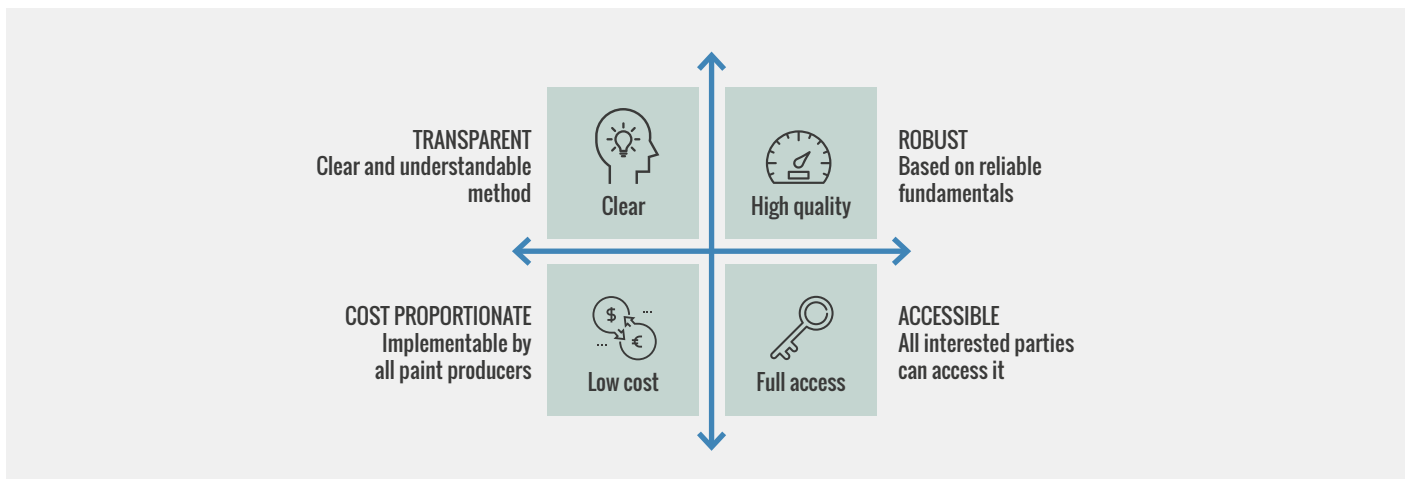
The Product Environmental Footprint (PEF) pilot project has started in November 2013 in order to create a Life cycle analysis (LCA) methodology which would be endorsed by the European Commission in order to evaluate under common product category rules the various products. The target of this project is to create a single market for green products and avoid multiple labels in order to show to the consumer the sustainable choices of products.

The EU supported 27 pilots and the one on deco paints is coordinated by CEPE. Several important steps have been taken at the level of the pilot, such as common rules of evaluation of the quality of the paint product

and specific methodology for the calculation of the coverage of paints. Durability is a core determinant for the sustainability of paints as the more maintenance needed the higher the environmental impact of a paint. Scenarios for whatever happens after the gate of the factory have been created and represent the European average. Part of the developments within the PEF project was the new database that was created by CEPE and will be used as the European standardised database for chemicals for paints (see below). This database ensures that the PEF calculations will be done based on representative information developed by the paint industry.

As we are nearing the end of the pilot phase (Dec.2017), CEPE has formulated four requirements that should be respected before

The target of PEF is to create a single market for green products and avoid multiple labels in order to show to the consumer the sustainable choices of products.



the PEF for deco can be used in our industry: transparency, robustness, cost proportion and accessibility (see figure above). The outcomes of PEF will be held against these four requirements in the coming months once the pilot phase has ended.

What are the next steps for CEPE in the PEF project?

The steps that are left in order to complete the pilot project are the following:

- » Ready-made LCA models: The European Commission will take over this step in order to create ready-made life cycle models available for all the pilot projects. One of the deliverables of this task will be to create models and datasets that will be compatible with 5 most widely used LCA softwares with a single format.
- » Final PEFCR: The Technical Secretariat will work on the completion of the final PEF Category Rules with the remaining elements that were left to be addressed since December 2016 and will integrate the new data from the PEF database in the calculation rules document.
- » Final Steering Committee: The last meeting of all pilots together is expected to be held around November 2017. During this meeting, the pilots will present the changes implemented and the progress during the whole period of the pilot phase with the achievements and decisions made. The pilots will vote for the acceptance of the PEFCRs of the pilots which will mean that the pilot has successfully completed the pilot phase.

What happens when the project is finished?

As from beginning of next year until 31 December 2020, the so-called 'transition

period' for the PEF project will begin. During this transition period, the project will be evaluated and the options for a potential policy will be discussed. The organizational format will be different than during the pilot period and the ways in which the successful pilots will be able to participate are two groups: the IPP/SCP group and the Technical Advisory Board (TAB).

The first group is an existing entity which was used in former policy contexts like the Eco-label, but did not include the industrial view. This time the industry will participate actively via the so called "industrial clusters". In total there will be eight industrial clusters from which two of them are relevant for paints: the construction products and the chemistry-based final products. For each cluster there will be one representative which means that the pilots interested in each cluster must assign a leader to represent all of them in the context of the cluster. The cluster will be open to relevant stakeholders for the discussions before each IPP/SCP group meeting in order to better prepare for the topics to be discussed. The procedures are still under discussion, but for the chemistry-based final products the decorative paints pilot has already expressed its interest in participating actively in the organization of the cluster. The same will happen for the construction products.

The second entity will have the same role as during the pilot phase. The TAB will act as an advisory body to the technical aspects of PEF and will help the IPP/SCP group to discuss and take decisions that would not be against the technical context of PEF. All pilots are represented there and the same applies to the decorative paints pilot.

CEPE'S LCI DATABASE DEVELOPMENTS

If you want to enable members to work on Sustainability like CEPE does then it is important to have a Life Cycle Inventory (LCI) database. The database was created in 2014 and each year an update is foreseen by both adding new raw materials and improving the current status or every three years to re-evaluate the time representativeness and the validity of the datasets already included. Since the creation of the database 323 raw materials were created by updating the background dataset sources to more recent ones. This increases the validity and the quality of the database.

CEPE LCI alignment with ILCD requirements and PEF

As 2017 was a year of an active review of the database, the Sustainability task force decided to align with the Product Environmental Footprint project. The Commission was tendering sets of datasets with certain requirements in order to be included in a European database as the best available datasets for several data topics. One of them was the Chemicals for Paints. CEPE participated in the competition for the specific project, and eventually became the winner. The datasets that were asked were 88 relevant to decorative paint formulations. Not all of the chemicals were part of this project as another database project was the generic chemicals. The deliverable of the project is a database for specific paints chemicals with several technical requirements fulfilled in terms of data quality, review and documentation and background sources. Several improvements have been





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done in comparison to the CEPE LCI database datasets, which were the basis for the development of new ones, such as even more recent background sources, minimum data quality, common way of documentation of a dataset etc. This project was for a part funded by the European Commission. The dataset will be accessible for free to the public that wants to run PEF calculations until 31 December 2020.

For the CEPE members, this database will be available for free in ILCD format and later this year a new database format will be introduced and will be compatible with the 5 most widely used LCA software. Further information will be provided once more information is known.

What is next?

Based on the latest developments of 2017, the Task Force will gather ideas and views from the users of the CEPE LCI database in order to set a CEPE vision for the coming 5 years. All CEPE members active in sustainability would be welcome to participate as their view is precious to better develop a vision that could cover the members' needs.

LIFE CYCLE STUDIES OTHER THAN FOR DECO IN PEF

In parallel to the development of the CEPE LCI database, various groups within CEPE have taken further steps towards sustainability by running their own screening life cycle analysis studies.

So far, the sectors that have their own studies run are the protective coatings for the life cycle of a steel bridge, the powder coatings for the life cycle of aluminium window frames and printing inks (EuPIA) who run a study on a virtual ink which is a theoretical average of all inks and serves as a reference.


For coil coatings a study on 7 different coil coating systems (variations in primer and types of topcoats) has just been concluded and results are under evaluation.

CEPE'S PARTICIPATION IN THE PLANT BASED SUMMIT 2017 IN LILLE, FR

CEPE participated in the Plant Based Summit that took place in Lille on 25-27 April. This event happens every 2 years and gathers all relevant stakeholders of the bio-based product and materials market, organized by ACDV (Association Chimie du Végétal). It comprised 18 sessions of different types of industries and gave an overview on bio-based issues. More than 500 professionals attended the various sessions.

CEPE acted as a moderator for one of the sessions that focussed on the Construction Industry. The topic of the session was: "How might paint become greener? Parameters to boost or break bio-based ingredients in the coatings industry". Jan van der Meulen, the Managing Director of CEPE, opened the session by introducing to the audience the CEPE vision where bio-based should lead to in the paint industry. The potential of the integration of the bio materials to paints was presented and the requirements of the industry towards these were discussed. The first speaker was Ward Mosmuller, the Director European Affairs in DSM. He spoke about the bio-based binders and how the supply chain can become more sustainable. The importance of the engagement of the whole value chain was highlighted and the need for the creation of new value chains was introduced in order to achieve a sustainable business process. For DSM, sustainability is high on the agenda and they focus on the carbon footprint by setting targets for lower carbon emissions. The

solution to this are the bio-based materials. The next speaker was Wolfgang Hoffman, the Head of Product Management in CAPAROL. During this presentation, the bio product of CAPAROL, "CapaGeo", was presented, a bio-based product according to the mass balance approach. The company ensures the high performance of the paint but also the reduced impact across its life cycle. The product has been embraced by the professional painters and CAPAROL educates with several commercials the importance of using bio-based products. The following presentation was from Nicolaus Raupp, the Global Sustainability Manager of Dispersions and Pigments in BASF. The equal performance quality for bio-based materials was raised again. The bio production process is certified by the recognised entity TÜV and the materials receive a label. The focus of BASF by using more biomaterials is to reduce the fossil use.

The final presentation was a combination of speakers: Eric Chevet, R&D Manager in Beckers, Fanny Langevin, Product Development in ARCELORMITTAL and Frank Cogordan, Business Development & Innovation Manager in ARKEMA. The focus of their study was the indoor applications of the painted coil systems. The basic characteristics of the systems are the long lasting durability with 100% bio-based materials and Cr and heavy metal free processes. The binders that were used were products of castor oil via the polycondensation process but were not bio sourced. The challenge of the study was the lack of available life cycle inventories for the bio-based raw materials which did not make it possible to have an overview of a life cycle analysis. Overall, the Summit was very well organised in a city of a region that has a promising potential in the bio-based market. 

REGULATIONS



SUBSTANCES

The EU wants to be the world leader in chemical safety management and...

...we do note it. But is the process always right? Let's review a few cases from the past year.

Titanium dioxide: a proposal for an EU harmonized classification that does not benefit society

When writing at this time last year the public consultation on the French proposal to classify it as a carcinogen Category 1B was about to close (July 15). A lot has happened since then.

Our Industry's participation during the public consultation was unprecedented with >500 contributions. This was noted by the Authorities in charge, although most input was not the type of information requested. Indeed, the EU classification legislation ('CLP') only looks at intrinsic hazard (toxicology), no room is made for any consideration of exposure, risk or socio-economic impact. The classification process is placed in independent hands, experts in toxicology from Member States. They form the Risk Assessment Committee (RAC), although in this case they only look at intrinsic hazard; the RAC has also other remits than the classification of substances.

On the one hand it is good to have decisions based on unbiased science, on the other hand there is a fear that it could sometimes go wrong if the experts do not have all scientific elements in hands. Hence, during the period between the end of the public consultation and the last discussion at the RAC in ECHA the coating industry supported the TiO₂ manufacturers (TDMA) in opening doors at national level to those Authorities who were willing to listen to arguments and to raise awareness of the importance of the substance. This awareness-raising action was successful.

Indeed, during a first discussion at the RAC meeting in March the topic

was tabled separately from the other substances as a 'dossier for key debate issue'. A second discussion took place at the June RAC meeting in an unprecedented manner as well (5 hours on June 1 and another 3 hours on June 8). Actually, after the case of Glyphosate, the TiO₂ dossier is considered as being the second biggest one of this year. Indeed, everyone was aware of the potential consequences that a classification could have, not only on the substance TiO₂ but also on other 'dusts', on chemical mixtures containing it such as paint or cosmetic and on articles containing it.

We all know what the outcome is since ECHA made a Press Release in the morning of June 9: Carcinogen Category 2 by inhalation. The worst has been avoided in the sense that a Cat 1B would have had direct consequences due to numerous chemical legislations, but a Cat 2 is still bad news for us.

The classification is not due to effects that are specific to TiO₂. It is due to the observation (in rats only) that excessive concentration of small particles of no specific shape prevents the normal physiological clearance mechanism of the lungs. The rats were exposed to overloading concentrations of such dust every day during their lifetime, which caused chronic inflammation leading to tumour formation. These effects were not observed with other animals and have not been observed in epidemiological studies in Human (on > 24 000 workers, although exposed to relatively low levels). Science shows that the carcinogenic potential is very low but RAC concluded that the available data are not sufficient to totally exclude an effect.



TiO₂: AWARENESS-RAISING ACTION WAS SUCCESSFUL

We can draw an analogy to a boat that meets an iceberg (Titanic) or a rock (Costa Concordia) and many other collisions at sea due to floating containers called Unidentified Floating Objects. The effects were the same and it was not substance specific. Do we need a legislation to label the object to warn the Captain that meeting such obstacle isn't good for his ship (and for himself)?

A closer parallel can be made with drinking hot beverages (>65°C). The World Health Organization concluded that very hot drinks may cause cancer. Hot drinks cause thermal irritation, and chronic irritation may lead to tumour formation. It is not substance specific as it is due to temperature. In simple terms the point to make is that it is not a substance specific effect, it is not a chemical effect, it is not a shape effect. Putting too much dust in your lungs is not good for you. Do you need a legislation to communicate this?

When a country like France proposes a substance to be classified a Carc Cat 1B it usually doesn't come out without any classification. Hence we were expecting the Cat 2 and we didn't wait to get prepared. The CEPE Advocacy Task Force held 13 calls and meetings during the past 12 months to develop an advocacy strategy with key messages, target audience, relevant periods and practicalities. It is also liaising with the manufacturers and other industry associations supporting us as the main user of TiO₂. More recently CEPE created two additional groups: the CEPE Media TF (to react to possible future media publications and to develop position documents for various audiences such as workers and customers) and a CEPE Business Interest Group to provide advice linked to business matters.

We expect to have to conduct advocacy activities at EU and at National levels during the coming 12 months. We still aim at avoiding any classification for TiO₂. The route to take is a follow-up of an official letter that we sent at high level of the Commission (COM) in May, questioning whether such particles should be in scope of CLP at all. We strongly believe that such classification does not provide benefit for the society and for Human Health. But it could cause harm.

We will follow all possible routes to avoid the worst and hopefully will be able to bring good news in our 2018 Annual Report.

THE SKIN SENSITIZER HDDA AND SVHC – THE GOOD NEWS

We reported last year on the Swedish attempt to classify HDDA (hexamethylene diacrylate) as a Substance of Very High Concern (SVHC) due to skin sensitizing properties based on REACH Equivalent level of concern Art 57(f) (ELOC). They tried to demonstrate that such potent skin sensitizer had an equivalent level of concern as Carcinogen, Mutagens and Reprotoxic substances Category 1. Our industry was involved with

the manufacturers in advocating against that proposal. At this time last year a first discussion had taken place at the REACH Committee level (political body) but the outcome was still unknown. We were happy to learn that the EU Commission considered that the case wasn't strong enough due to lack of evidence of permanent skin damage, which was supported during the vote. During subsequent months a general discussion took place at the CARACAL level (REACH and CLP Authorities) to consider what level of evidence would be required to motivate ELOC for skin sensitizers in the framework of the SVHC 2020 Roadmap. A debate took place during the March 2017 CARACAL with the possibility to submit written comments later; CEPE expressed its support for removal of skin sensitizers from the SVHC 2020 Roadmap through the downstream users' platform DUCC. Surprisingly no conclusion was reported during the June CARACAL meeting, at least in open session (where Stakeholder Organizations are allowed to be present).

D4, AN ESSENTIAL MONOMER FOR SILICONES: A TEST CASE FOR FUTURE LINK BETWEEN REACH PBTS AND POP?

D4 (Octamethylcyclotetrasiloxane) is a vital building block monomer to manufacture all silicones (which are polymers), together with other siloxane monomers. At least 99.5% of D4, an essential monomer, is used to make polymers and the registrants do not cover any other intentional use in their chemical safety report. Silicones are used in an impressive range of applications in many areas such as healthcare (medical devices, implants), defence sector, energy (solar panels etc.), construction, cosmetics, aerospace, automotive, lighting (LED) etc. They bring unique properties that are not matched by other chemistries. In coatings and printing inks they are used as defoamers, slip agents, flow control additives, hydrophobic agents, heat resisting coatings for stoves, exhaust system, furnaces and silicone resins are also used in the construction area. In our industry D4 is not used as such but may be present in small amounts as unreacted ingredient in silicones. D4 is another interesting test case of how chemicals regulation is applied in Europe.

D4 has been assessed as a PBT (Persistent, Bio-accumulative and Toxic chemical) under REACH. D4 is a member of the chemical family 'siloxanes' based on silicon and oxygen, rather than the carbon chemistry. Although the science used is still challenged due to the fact that the standard study guidelines may not fit this specific chemistry, regulatory measures are being implemented.

A proposal for an EU wide Restriction to eliminate the use of D4 and D5 (monomers, 'direct' use) in wash-off cosmetic products has been

adopted in May 2017. The restriction targets aquatic emissions of D5 primarily; D4 was included to prevent potential substitution of D5 by D4. This should significantly reduce emissions to the environment and industry believes that this regulatory action, although unjustified based on science and risk, is proportionate and it is therefore committed to its success. The silicones industry has committed to run a large-scale, multi-year monitoring programme. More recently the EU COM unexpectedly asked ECHA to assess the relevance of further restricting the use of D4 and D5 in leave-on cosmetics, but also in other consumer and professional products containing >0.1% of free monomer. Both water and air contamination are in scope (D4 and D5 are volatile). Our industry has been asked to contribute to ECHA's Call for Evidence by providing relevant use and exposure information. It is important to note that no decision has been made so far; ECHA will report its findings by April 2018.

The most controversial regulatory development came as a surprise to Industry: in March 2016, **the European Commission proposed to nominate D4 as a Persistent Organic Pollutant (POP)** under the UN Stockholm Convention, trying to bridge an automatic link between a REACH PBT assessment and a REACH restriction to a POP nomination. The Commission sees the Stockholm Convention as a very effective means of regulating chemicals globally and is determined to continue its active engagement under this Convention. The purpose of the Stockholm Convention is to eliminate globally the manufacture and use of chemical listed as POP. The Convention has the potential to ban globally a substance, and potentially also in future the manufacturing of polymers derived from this substance. The Stockholm Convention has until now only dealt with substances for which there is a global consensus on their harmful and polluting characteristics based on robust scientific evidence (such as DDT, Aldrin, pentachlorobenzene, PCBs). The Stockholm Convention was neither designed nor intended for the management of large scale 'building block'/intermediate chemicals, such as D4, which are subsequently converted into other (non-hazardous) products.

Industry has been very active in providing scientific facts and data (e.g. long range transport criteria not met, low re-deposition potential, degradation in air), as well as highlighting the huge socio-economic impacts a POP nomination would have and questioning the merit of using this regulatory scheme for D4 (inconsistent with the REACH restriction conclusions and disproportionate). **The European Council of Ministers decided in April 2017 that D4 should not be nominated as a POP** candidate under the Stockholm Convention at this stage. Noting that the POP listing process is highly political and unpredictable, it is of critical importance to do an in-depth assessment before 'pressing the nomination button'. The Stockholm Convention does not have any provision for comprehensive impact assessment. In view of the potential impact, the nomination process needs to be improved, technical guidance developed and the role of ECHA clarified (the EU POP Regulation Recast provides this opportunity). The Industry concluded 'This case study is an example of a Commission initiative that to the chemical sector appears to be inconsistent with the fundamental regulatory principles embedded in the Better Regulation agenda as well as with basic principles of good administration such as transparency, proportionality and stakeholder consultation'.

D4 is a case study for the chemical industry at large as it demonstrates that a PBT assessment under REACH can lead to a global ban a few years later.

DI-ISOCYANATES: AN ESSENTIAL REACH RESTRICTION FOR AN ESSENTIAL CHEMISTRY

At this time last year we were expecting that the German Authorities would submit their EU wide Restriction proposal by October 2016, which they did. They had to re-submit it early 2017 as some clarifica-

The fear for small quantities of residual monomer should not lead to killing a field of chemistry that forms the base of a range of products that benefit our society.

tions were requested. It is now official and the main dossier is available on the web and contains 472 pages.

As expected the proposal is for mandatory training of professional workers using products containing >0.1% of free monomers of di-isocyanates. This is typically the case in 2-pack polyurethane coatings. The sectors affected are: aerospace, vehicle refinish, protective, marine, and to a certain extent printing ink and can coating (industrial uses only). Some products may be sold in the decorative sector as well (flooring products).

Within CEPE groups this topic is discussed at every meeting of the relevant sectors, in addition to the dedicated CEPE NCO TF. We are directly linking with the manufacturers (ALIPA/ISOPA) and take an active role. None of our sectors intend to apply for exemptions, we are committed to ensure successful implementation.

Because it is the first time that such EU-wide restriction would cover so many details, especially on training content, it is expected that serious discussions will take place during EU meetings of Member States Authorities in the coming months. Any use that would fall in scope would require a certain level of training. Training modules are proposed based on the risk level. The practicalities of developing the training content, training the trainer, training the workers, certification, etc. are set in the form of a proposal. The involvement of downstream user industries will be limited to providing training content for most of the training material that the manufacturers have to create, but we will probably have to generate some sector specific ones.

BPA: IS THERE AN END?

Obviously according to the French agenda the end of the pressure will be when bisphenol-A will be totally banned in Europe. It was not enough to classify it as Repro Cat 1B with the subsequent SVHC status. It has now been agreed unanimously at the Member State Committee to consider it as an Endocrine Disruptor for Human Health as well (before COM issued the final criteria for ED identification). And EFSA now intends to re-open the books again to re-assess its safe use according to the most recent information available.

As SVHC substance in the Candidate list, BPA could be proposed for Authorization. However, BPA is considered as an intermediate and so not subject to Authorisation. There is some concern that the definition may be changed so that it would be excluded as an intermediate and so come under Authorisation, but at the moment this is not affecting the manufacture and use of epoxy coatings.

France has maintained its total ban for use of epoxy-based can coatings (in effect since 1 January 2015) despite the favourable EFSA opinion concluding on safe use, and COM has been unable to force it to change their law. This case is interesting in the sense that if one Member State does not accept the scientific opinion of the European Food Safety Authority then the door is open for further dis-harmonization. And for politics to take precedence over science.



Shift in focus from development of tools to implementation

CEPE is an Accredited Stakeholder Organisation at ECHA and was a participant in the 'Chemical Safety Report/Exposure Scenario Roadmap' 2013-2016. This programme set out to improve the quality of information used by registrants for their CSRs and communicated along the supply chain in Exposure Scenarios (ES), and was developed, promoted and implemented through the Exchange Network on Exposure Scenarios (ENES), a large network of representatives from industry, authorities, NGOs and ECHA. Much of the work by formulating industries has been done collaboratively as DUCC, the Downstream Users of Chemicals Coordination Group, of which CEPE is a member and currently holds the chair.

The following are some of the key outcomes from the Roadmap.

USE MAPS

Downstream user sector organisations are in the best position to define the typical uses of and exposures to substances used in their sectors, which can then be used by registrants in their substance dossiers. CEPE has published information on the use conditions for substances – both in formulation and in the application of paints and printing inks – since 2009, via the UseR (use reporting) template developed by DUCC. Under the CSR/ES Roadmap this concept was further developed by ECHA into a package comprising “improved use maps”, plus related exposure assessment inputs in standardised formats. In common with other formulating sectors, CEPE has published an updated use map with the following linked assessment inputs:

- » **Sector-specific Worker Exposure Descriptions (SWEDs):** 17 CEPE/EuPIA SWEDs were developed for defined common scenarios in the application of paints/coatings (13) and printing inks (4).
- » **Specific Consumer Exposure Determinants (SCEDs):** a set of 10 SCEDs was generated for DIY painting and related activities, based on the results of a consumer survey CEPE conducted in 2015. Additional

SCEDs for artists' colours are in development at the time of writing.

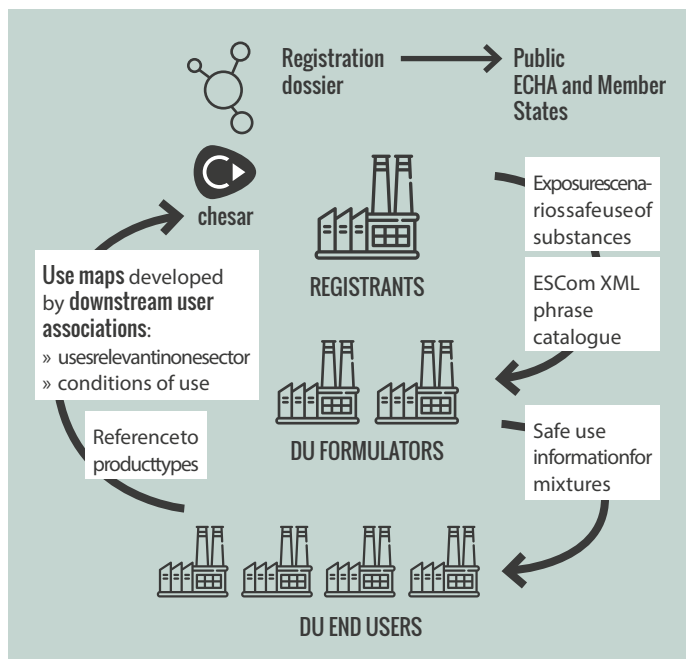
- » **Specific Environmental Release Categories (SPERCs):** CEPE had already established a set of SPERC factsheets back in 2010. These have now been updated into a new 'best practice' format and enhanced with background documents elaborating the rationale behind these release estimates.

Use map information is available both on sector associations' own websites and also in the 'use map library' hosted on ECHA's website, for greater ease of access by registrants. Having developed these tools, the focus now is on promoting their implementation by all actors in the supply chain; in October 2016 DUCC co-signed a tripartite agreement, together with Cefic and ECHA, committing to this.

SAFE USE OF MIXTURES INFORMATION FOR END USERS

REACH requires downstream users (formulators of mixtures) to pass on relevant ES information in their safety data sheets to the downstream users of their products. Possible options for doing this are mentioned in ECHA guidance, including appending or integrating consolidated ES information, but industry has had to develop solutions to achieve this in practice.

In common with some other sectors in DUCC, whose members produce mixtures for clearly-defined end uses, CEPE developed a so-called 'bottom-up' approach to communicating this information. For each of the 17 SWEDs mentioned above - i.e. standardised sets of Operating Conditions and Risk Management Measures aiming to cover c.80% of professional or industrial uses – there is a corresponding SUMI, or Safe Use of Mixtures Information document, which provides clear, concise information to end users on the conditions of safe use for a mixture. **The SUMI can be supplied appended to (or integrated within) an SDS as a simpler alternative to passing on exposure scenarios for individual substances in the mixture.** General information on the approach is available on the DUCC website: www.ducc.eu/publications.aspx.



CEPE's SWED/SUMI approach was formally launched in April 2017 via internal communications to the membership. External publicity will follow later after members have had sufficient opportunity to implement. A detailed guideline explains how to apply the approach and how to 'validate' mixtures against the relevant SWEDs (plus some guidance on what to do if they do not fit). **The suite of SUMI documents is being translated into all European languages, and the roll-out of the approach includes training workshops by country organised by national associations and supported by CEPE.**

The SWED/SUMI approach has been welcomed by ECHA and numerous national competent authorities, as a way to facilitate both the REACH communication obligations for downstream users and making the connection between REACH and occupational health and safety. In 2017 SWED/SUMI approaches are being tested by pilot projects organised by Cefic (in cooperation with other DUCC sectors) and by the Italian competent authority.

Note that – unlike use map information which is openly communicated to supplier sectors – CEPE's SWED/SUMI approach is available only to members via the Workplace and not publicly. It is considered an added-value benefit of membership, like the CEPE Labelling and SDS Guides and the Phrase Catalogue. The tools and templates to create one's

own SWEDs and SUMIs are however freely available to all through the ECHA and DUCC websites.

ESCom

Through DUCC CEPE continues to support and co-fund ESCom, the standard for electronic transmission of ES information through the supply chain, and its associated library of standard phrases to harmonise ES communication. The standard phrases are now widely used and well embedded in use map elements and relevant IT systems, such as ECHA's Chesar tool for Chemical Safety Assessment. Implementation of the ESCom XML communication format has however been rather limited to date; it is hoped that e.g. the use of SWED/SUMI approaches by formulators might provide a driver for its wider adoption. In the meantime however the joint partners Cefic and DUCC (with support from ECHA as observer) are investigating business models to make the ESCom package self-sustaining for the future.

ENES WORK PROGRAMME 2017-2020

Having established a set of tools through the CSR/ES Roadmap as mentioned above, ECHA is now looking to put in place a new work programme for 2017-2020 together with its partner authorities and stakeholders. This programme will focus on practical implementation, maintenance and improvement of the tools and on engaging a wider community, in particular end user sectors who have had limited involvement so far. The content of the work programme is due to be finalised in autumn 2017 and relevant organisations will be asked to sign up by the end of 2017.

As part of this programme CEPE, through its Exposure Scenario Coordination Group, and DUCC will continue to develop and enhance their own tools, for example the possibility to apply a 'SUMI' concept for environmental release information as well as for workers' exposure.

ENFORCING THE OBLIGATIONS

In 2017 the fifth REACH-EN-FORCE project (REF-5) is being conducted by national enforcing authorities, as agreed in ECHA's Forum on Enforcement. This enforcement project focuses on extended safety data sheets and how they are processed and acted upon along the supply chain. In February 2017 CEPE provided advice to members on readiness for inspections under this project, including the potential need to explain the use of the SWED/SUMI approach if members are already doing so.

REFIT

An EU Commission programme to analyse if the EU chemical legislation is fit for purpose. What could it deliver?

What is REFIT?

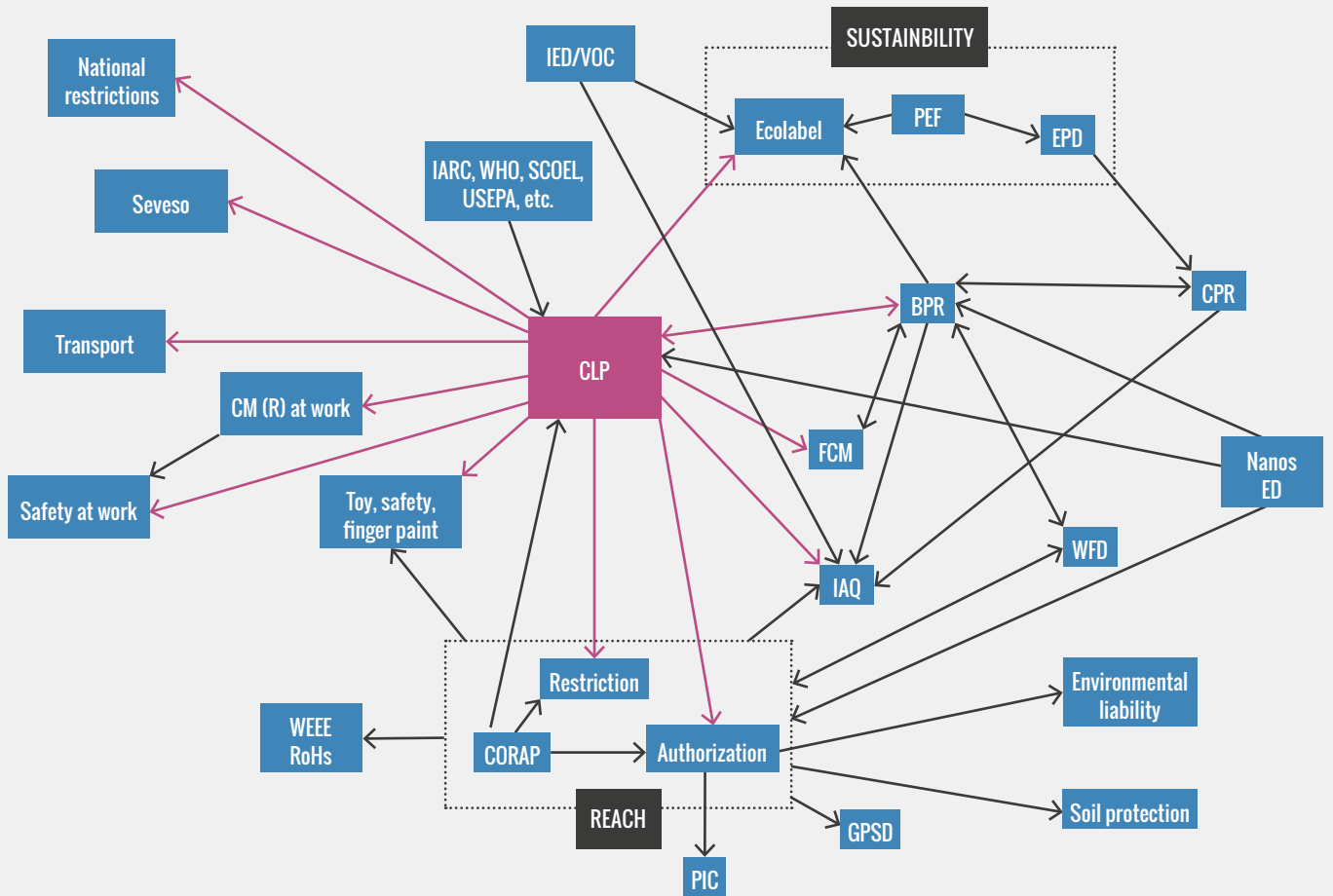
The Commission's Regulatory Fitness and Performance (REFIT) programme ensures that EU legislation delivers results for citizens and businesses effectively, efficiently and at minimum cost. REFIT aims to keep EU law simple, remove unnecessary burdens and adapt existing legislation without compromising on policy objectives. REFIT is part of the Commission's better regulation agenda. It makes sure that EU laws deliver their intended benefits for citizens, businesses and society while removing red tape and lowering costs. It also aims to make EU laws simpler and easier to understand.

IS THE EU CHEMICAL LEGISLATION REALLY BURDENSOME?

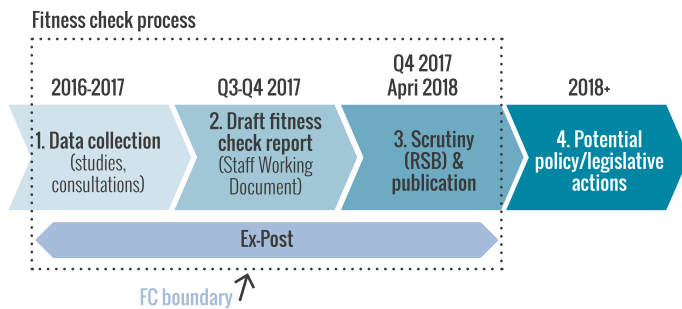
Well, the slide on the next page doesn't need long explanations:

We have to comply with many chemical legislations, which generate many 'activities'. CLP is central and is hazard based. When a substance gets a new harmonized classification the impact can be high on all those legislations that simply refer to such hazard based element.

Cascading effects: activities and legislations impacting the coating and printing ink industry and their inter-connections



TIMING OF THE REFIT EXERCISE



IN PRACTICE

Two separate REFIT exercises are conducted: the first one on all chemical legislation except REACH, and the second one on REACH. Within the EU Commission, on the first one DG GROW ran a first impact assessment using a consulting firm. CEPE contributed in 2016. The report is now final and available on the EU COM website (>1000 pages). This year DG ENVI started a second impact assessment and we were again consulted. At the time of writing these notes the report was not yet finalized.

It goes without saying that our input covered some of our biggest issues

1. classification and labelling of paint containing dusts (ref to TiO_2)
2. the need for a holistic approach on the review of biocide preservatives

3. the burden of the coming poison centre declarations.

Comments were also provided on the REACH REFIT. CEPE also contributed through DUCC.

WHAT CAN BE EXPECTED?

It is still too early to say but it seems already clear that the hazard based classification and labelling concept will continue. It also appears that the point is well noted by COM concerning the possibility to improve the communication of hazard, especially for consumer goods. The REFIT exercise for COM will be finalized next year. It will then have to be politically handled so it is not at this stage possible to say what is likely going to be picked up for legislative improvement. Because this is a unique opportunity to comment (no other opportunity will be offered in the next 10-15 years) on what we believe should be improved, we encourage everyone to participate when possible and certainly during public consultations (citizens, companies, associations...).

CLP is central and is hazard based. When a substance gets a new harmonized classification the impact can be high on all those legislations that simply refer to such hazard based element.

SUBSTANCE RISK ASSESSMENT GROUP (SUBRAG)

The CEPE SubRAG is gradually getting in motion

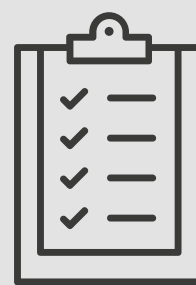
Status. Carrying out substance risk assessment is not common practice within the CEPE community, understandably as members are downstream users under REACH and rely on the information provided from Registrants (suppliers). This explains why SubRAG has been continuously calling for additional resources. We explained last year that SubRAG was still trying to recruit, now a 'job description' has been circulated and explains that the necessary profile is not limited to toxicologists or risk assessors, it also needs input from company members having technical or regulatory knowledge.

SubRAG addressed one possible replacement for MEKO and communicated through a CEPE Signal on its satisfaction of the information presented by the Manufacturer during a meeting. The group also discussed at length TiO₂ and helped forming a CEPE position to support the CEPE representation during the RAC discussion in Helsinki in June. Finally, CEPE Sector groups have been asked to provide input on two substances, namely AMP and carbon black.

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CARRYING OUT RISK ASSESSMENT



PROVIDING INPUT & FORMING POSITIONS

NANO MATERIALS

Nano size particles that are part of the tail of the size distribution of long time used pigments and fillers should stay out of a definition on nanomaterials that may be used for future legislation.

What is the issue?

The authorities in some EU Member States believe that not enough is known on the safety and health aspects of nanomaterials. And to be rather safe than sorry they want to regulate or at least monitor where such materials go in their country. Obliging companies to register their nanomaterials in these countries.

In Sweden at this moment a proposal is in the making which is aimed at getting into force by February 2019.

EU Commission believes in REACH...

The European Commission is not denying that nanomaterials may have some health or safety issues but thinks that with REACH these issues will be part of the manufacturer's registration. The nano form is so far not explicitly mentioned in REACH but will via a new annex be included.

The amendment for this is undergoing the inter-service consultation before it will be discussed at the REACH Committee.

... and in an EU Observatory

The Commission opted NOT to create an EU nano register, but agreed to host an EU Observatory for Nanomaterials (EUON). It is an informative platform on data on nanomaterials, their use and markets and their potential health and safety issues: www.euon.echa.europa.eu/ Launched in June 2017 it will see further releases of updates in 2018 / 19.

It is mainly about the definition

Important in all the discussions is to know what one is talking about when it comes to nanomaterials. The EC launched a 'working definition' for nanomaterials in 2011. Which is about to be reviewed for its suitability.

With a definition that only deals with the dimensional aspects of nanomaterials the CEPE members may face:

- » A disproportionate administrative burden.
- » An unnecessarily increase in business complexity (= costs) for the industry (testing and proving; the nanoscale, the nano-content, the toxicology aspects)

This would lead to an overload of registrations which will not distinguish between the nanomaterials with 'real' hazard concerns and those who have been evaluated and in use since ages.

What is CEPE's opinion?

In all of the discussions on nanomaterials it is important to focus on those nanomaterials for which reasons exist to address their potential or perceived hazard. Applying the EC definition on each and every powdery substance will categorize many of these substances as nanomaterials. While suppliers of such substances will have a certain limited number of nanomaterials in their portfolio, downstream users like the CEPE members will have thousands as they typically use at least one such substance in most of their formulations. If the decision is made to retain the current working definition, it will be the producers of mixtures who will be impacted the most by any forthcoming administrative obligations on 'contains nanomaterials' (which may result from legislations or registers). The users of these mixtures will get the wrong message that they either receive newly developed mixtures, or that the mixtures they always received and used were more hazardous than they were previously informed.

CEPE also believes that the delivery form of nanomaterials that may pose a risk (the

unbound or agglomerated nanoparticles) – that this risk disappears once the nanomaterial is incorporated into the matrix of ingredients of the mixture, which has been proven by several recent studies.

Where does the issue stand at this moment?

The Joint Research Committee wrote a report with options for improvements of the 'working definition'. CEPE's Task Force has evaluated these options against its strategic objectives and waits until an official consultation will start on the 'preferred options' of the DG Envi and DG Grow. The publication of the 'preferred options' is heavily delayed.


Advocacy via standard setting bodies

CEPE is involved in the discussions on standards both at the CEN and at the ISO level. The Commission has mandated the CEN TC 352 to develop European standards, which could be later adopted in regulations applicable to nanomaterials. At ISO level, numerous standards on terminology and HSE aspects are being developed. Since 2013, FIPEC ensures via the IPPIC representation in these ISO meetings that the voice of the paint and ink industry is being heard.

What will CEPE do as next steps?

Continue to collect scientific studies on nano in matrices.

Advocate in standardization bodies the industry's position.

Comment during the EU consultation on the 'preferred options' for the nanomaterials definition. 

	FRANCE	BELGIUM	DENMARK
Since	1st January 2013	1st January 2016 for substances and will enter into force on 1st January 2018 for mixtures	13th of June 2014
Declaration of	Substances at nanoscale: » on its own » contained in mixture without being linked to it » material (intended to reject such substances under normal or reasonably foreseeable conditions of use Only professional network concerned	Substances at nanoscale: » on its own » contained in mixture Only professional network concerned	Mixtures and articles » that are intended for sale to the general public and » which contain nanomaterials, where the nanomaterial itself is released under normal or reasonably foreseeable use or » where the nanomaterial is not in itself released - but releases substances in soluble form which is classified as CMR substances or environmentally dangerous substances Only concerning products intended for consumers. B2B is exempted.

HAZARD COMMUNICATION



INFORMATION FOR POISON CENTRES

After the Regulation, the real work begins

On 23 March 2017, after more than six years of discussions culminating in a final workshop in January, Commission Regulation (EU) 2017/542 was finally published adding a new Annex VIII to the CLP Regulation (1272/2008) on 'harmonised information relating to emergency health response'. This requires information on mixtures classified as hazardous (for health or physical effects) to be submitted to 'appointed bodies' in Member States where the mixture is placed on the market, to enable appropriate treatment advice to be given in cases of poisonings as well as to identify needs for additional risk management. The new requirements will apply in phases, commencing from 1 January 2020 for mixtures destined for consumer use, and running through to 1 January 2025.

From the beginning CEPE supported the goal of harmonisation, to simplify the patchwork of different reporting requirements that existed in Member States across Europe. The provisions that have now been adopted are however quite complicated, and a lot of work still needs to be done in order for all parties to be ready on time. For this reason the European Chemicals Agency (ECHA), which is now responsible for the implementation of Annex VIII (see <https://poisoncentres.echa.europa.eu/>) set up three expert working groups to run through 2017. These groups all comprise some 20-30 members, and CEPE participates in all three:

IT user group

This group has a mandate to develop the software tools needed to support the practical implementation of the regulation, namely the submission format, editor and portal. The first two already exist in draft form and need to be adapted to the final requirements; the latter is a planned 'one-stop shop' on the ECHA

website, where companies can submit files for all relevant Member States as an alternative to using countries' own systems. The ECHA portal could also offer data storage and additional functionality as required by Member States, and at the time of writing the portal is the subject of a feasibility study. All of the IT tools are intended to be ready before the beginning of 2019, so that submissions can begin in good time before the first deadline.

Guidance working group

This group is working on the drafting of a guidance document on the Annex VIII requirements, which will then go through ECHA's normal consultation process in 2018 to be in place by the start of 2019. The group addresses open questions and interpretation issues via an online forum, but in some cases input from the Commission or from EU legal services is required. CEPE also aligns with other formulating industry colleagues on this topic through a task force of DUCC (Downstream Users of Chemicals Coordination Group).

Product Categorisation System (PCS) focus group

The role of the PCS is to identify the intended use(s) of a mixture – e.g. as a paint, a printing ink or an artists' medium - in a standardised way across the EU, to facilitate statistical analysis and identification of risk management needs. A draft PCS was developed in 2016, and this group has the mandate to develop a final version by the end of 2017.

Besides the direct CEPE participants in these groups, members are also regularly consulted on these issues through targeted e-mail distribution lists.

Workability study on certain requirements

In parallel to the implementation projects above, the European Commission is also launching a study into the workability of the

requirements for several areas identified as problematic, with a view to amending Annex VIII if necessary before it becomes mandatory. The problem areas include:

- » Large paint mixing/tinting systems, where (even in spite of the use of the generic identifier 'colouring agents') individual mixtures will not be sufficiently 'the same' to qualify for a group submission;
- » Petroleum and construction products, made to specifications rather than recipes, where inherent batch-to-batch variability in composition would trigger constant updates to submissions despite no change in product identification or classification and labelling;
- » Implications of the Commission's interpretation that the use of a mixture (i.e. industrial, professional or consumer) is determined by the ultimate use of that mixture, including as an ingredient blended into a larger mixture during formulation (mixture-in-mixture or MIM). This will bring many – or even all - submissions for raw material mixtures into the first phase before 01/01/2020, so COM must analyse whether there is sufficient knowledge available in the supply chain on downstream uses, and whether that level of detail is necessary given the dilution of the MIM, as well as the fact that many of the final mixtures will be non-hazardous and hence not subject to submission themselves.

CEPE will engage fully in this important study and real-world input from members will be provided to illustrate the issues.

CLP: CLASSIFICATION, LABELLING & PACKAGING

The last stage: old EU labels finally disappear

The 'CLP' Regulation (EC) No. 1272/2008 became mandatory for mixtures on 1 June 2015. All paints, printing inks etc. placed on the market from that date had to be labelled and packaged according to the new rules. There

was a two-year transitional period for goods placed on the market before that date, but from 1 June 2017 no packages with the old DPD labelling (orange symbols) must remain anywhere in the supply chain.

CEPE had lobbied for a pragmatic interpretation of 'placed on the market' in this context, and this was successfully achieved: the Commission ruled that products packaged, labelled and cleared for sale by 1 June 2015 (but still in the physical or legal possession of the formulator) could qualify as placed on the market. This interpretation was included in ECHA guidance and a Q&A on their website. Distributors and retailers had an obligation to remove or re-label DPD-labelled stocks from their shelves by 1 June 2017. In November 2016 CEPE updated its guidance note on the transition period, first published in 2014, to clarify that members had no legal obligations in this regard but should consider how best to support customers for business reasons.

Updated guidance on CLP

In 2016 ECHA began work on the revision of two key guidance documents, the Guidance on the Application of the CLP Criteria and Guidance on Labelling and Packaging, to update them to the 8th ATP (Adaptation to Technical Progress), Regulation (EU) 2016/918, as well as the latest views in other areas including the outcomes of a CARACAL sub-group on labelling and packaging issues. CEPE participated in the Partner Expert Groups (PEGs) for both revisions and gave important input in each case. The new versions of the two guidance documents were published on 4 July 2017.

The Guidance on Labelling and Packaging v3.0 includes one very significant new addition. A new section 5.4.2 provides an important and much-needed interpretation for CLP Article 33(2): a transport consolidation package, containing supply packages for protection and ease of distribution, is not considered to be outer packaging within the scope of CLP and thus need not carry CLP labels if it is not required to be labelled/marked according to the rules on transport of dangerous goods. This interpretation began life as a CEPE position in 2012 and in 2013 was adapted into a DUCC guidance note, which was used as a basis for discussions in CARACAL and the PEG. The adoption of our interpretation into the official guidance is a great success for CEPE and finally lays to rest a problem that has troubled industry since CLP first came into force in 2009.

CEPE of course also maintains its own guideline for members on labelling and packaging, managed by the Technical Committee 'Labelling and Safety Data Sheets' (TC-LSDS). This builds on the ECHA guidance with additional sector-specific advice for members, including a selection tool for precautionary statements which has been updated to reflect the latest ECHA guidance. Extra guidance has also been developed for members on the labelling of mixtures containing skin sensitising substances, including advice on chemical names and the most optimal way to combine the labelling requirements of CLP and the Biocidal Products Regulation (since most of these substances are used as preservatives). This was published in November 2016 as an update to the 'Guidance on labelling of treated articles'.

Although technically a REACH issue and not CLP, CEPE also continues to maintain and update its Guideline on Safety Data Sheets and the associated Phrase Catalogue. In 2017 CEPE is establishing a process for management of the Phrase Catalogue to ensure its continued future availability and currency.

Safer use of chemical products through simpler labels

Prompted partly by findings about poor consumer comprehension of labels in the Commission's Fitness Check on chemicals legislation, DUCC has launched a long-term initiative to explore ideas to simplify labels in the interests of clearer hazard communication. The first project under this umbrella involves piloting a precautionary pictogram to replace the statement "keep out of reach of children"; this is being led by the detergents sector A.I.S.E., but it is of interest also for CEPE and several member companies have volunteered to participate in trials.



FUTURE CLP: ATPs AND THE UN GHS

Early warning, and the ability to influence

The CLP Regulation implements the United Nations Globally Harmonised System of Classification and Labelling of Chemicals (GHS) in the EU, and revisions of GHS are incorporated into CLP by periodic Adaptations to Technical Progress (ATPs). Other ATPs serve to update the


list of harmonised substance classifications in Annex VI to CLP; inter alia CEPE has advocated actively on the proposed classification for MIT (see biocides article), to be included in an ATP due for vote in autumn 2017.

In late 2017 the Commission will prepare an ATP updating CLP to reflect both the sixth and seventh revised editions of GHS (published in 2015 and 2017 respectively), after a delay in moves to incorporate the sixth. Most of the changes to criteria are only incremental, apart from the inclusion of the new hazard class 'desensitised explosives' (important for industrial nitrocellulose, used as a raw material in printing inks and some coatings). Perhaps more important however are the additional changes proposed within the EU, such as an amendment to Article 29 explicitly enabling multi-lingual fold-out labels to be used for more than one Member State. On one hand this is good news, after years of argument over interpretation of the legal text, but on the other the Commission intends to limit this to a maximum of six languages, which would impact severely on current practice for many companies. CEPE and DUCC have advocated strongly against this limitation in the competent authorities' group CARACAL, and will continue to do so through the CARACAL sub-group on the ATP.

Influencing at UN level

CEPE heads the IPPIC delegation in the UN Sub-Committee of Experts on the GHS and works to influence the criteria as they are set at global level. Some of the key issues being worked on in the 2017-2018 biennium are as follows:

- » Aspiration hazard – establishing appropriate viscosity criteria for paints/inks
- » Use of concentration ranges in section 3 of the SDS (in collaboration with Cefic)
- » Precautionary statements and pictograms – rationalising complex and confusing statements, and introducing pictograms to supplement/replace common warnings
- » Practical classification issues, including the application of bridging principles and how to reflect non-animal test methods in the criteria

The UN Sub-Committee has recently adopted a new guidance annex on dust explosion hazards (rather than a new hazard class), and will discuss whether/how to proceed with the development of a non-binding global list of substance classifications following a pilot project. There is considerable demand for the latter, but also concerns about its implications for existing lists such as CLP Annex VI. 

BIOCIDES

The Biocide Competent Authorities continue to dismiss Industry's request to take a holistic approach on in-can and dry-film preservation

What happened since last year?

CEPE continued to lead the coalition of downstream users of in-can preservatives, with namely the detergent, the adhesive and the polymer dispersion manufacturer industries. We altogether met in September 2016 the EU Commission (COM) DG GROW at the Director level, together with the representative of DG SANTE who is in charge of the biocide legislation. Our delegation was made of the Directors and the Presidents of each association, together with the CEPE expert on this topic.

The key messages received were that we have to continue talking to DG SANTE and we have to innovate. What does this mean?

It means that DG GROW cannot help us. It is not their dossier and there is no political support to change the situation. In the long run, under the review of the EU chemical legislations (are they fit for purpose – the REFIT programme) they will look at it to understand if the reasons that lead to this unbalanced handling of that legislation will have changed, which means that if the political environment hasn't then there is little they will be able to do. As a comparison REACH is co-managed by DG GROW and DG ENVI and socio-economic analysis is embedded in the decision making process. We know for long that DG SANTE do not have to consider industries' concerns, they do not have to take into account socio-economic aspects before making decisions on the future of a biocide substance. Their remit is largely limited to review the safety of biocides under very stringent/conservative conditions.

The point on innovation means that we are challenged to either try to find alternative biocides (but we are not biocide manufacturers) or to conceive our products without biocide in-can preservatives. Could we place on the market our products with high pH? Could we place them in powder form? Could we sell paint in plastic pouch such as boxed wine? Could we sterilize the products? In fact, it means that the political pressure to reduce or eliminate the biocides is so high that we are pushed to think about these wild ideas. Innovation is in the mind of DG GROW which is convinced that regulatory pressure will



force new ideas. Easily said. Too easily said for microbial control.

Have we seen evidence of further pressure on some key actives?

Yes, MIT is proposed to get an EU harmonized classification with a threshold of 15 ppm. It is now in the hands of the REACH Committee. We have used the opportunity of the discussion that took place in CARACAL to raise our general concern of the reduction of effective tools.

Zinc pyrithion has been proposed to be classified as Reprotox Cat 1B. We have also used the opportunity to raise our concern during the CLH public consultation.

Propiconazole was also unexpectedly proposed for such adverse classification.

Did we then go back to DG SANTE?

Yes, at the Biocide Competent Authorities (CA) Meeting of March 2017. The outcome was disappointing, as always at that level. We called for a holistic approach whereby the Rapporteur Member State would align their PT6 substance submission to ECHA by the legal deadline end 2019. It is not in theory difficult and actually it may anyway come naturally as they are overloaded, but nevertheless we came out with more questions. We are challenged in all we say. If we tell that some biocide substances are no alternatives it is not sufficient to state 'not enough effective' or 'affects the integrity of paint'. We have to prove it. Some called for a socio-economic analysis. Again easy to say. The first thing you

would need to do is prove lack of alternatives. The second would be to consider different scenarios: 'what happens if that active goes?', 'what happens if that family of active goes', 'what happens if both go'... At least we can easily answer the last scenario 'What happens if all PT6 actives go': let the population buy a second fridge to keep the paints cold. Is this a solution?

What's next?

Although very challenging we will continue to try addressing these 'Competent Authorities' questions. In order to progress with the Biocide Authorities, we have to develop stronger evidence that we are facing increasing difficulties with the preservation of our products. We may have to invest in performing efficacy studies.

Fundamentally the biggest issue is lack of political support on this dossier. Hence in parallel we should develop other ideas. COM seems to be acting sector by sector in isolation, without a holistic approach on important subjects such as environmental protection. We see this with anti-fouling paint where the problem of invasive species brought by unclean hulls is handled by another Directorate than DG SANTE. We should think of possible other priorities of COM to gain attention and support from others within COM. Sustainable development and Circular Economy cannot be achieved without good quality and long lasting products.

Our focus is at the moment on in-can preservation as this comes before dry-film preservation in the BPR Review Programme, and also because we have support from other industries. But dry-film preservation will follow the same difficulties with probably even more attention. The biocide topic is still hot and a priority for our industry and we will continue our efforts to ensure that effective preservation tools remain available. 📍

Paint producers are challenged to either try to find alternative biocides or to conceive our products without biocide in-can preservatives.

EDUCATION

The paint industry is facing an ever greater shortage of paint chemists with an academic degree.

What is the issue?

CEPE's Working Group on Education has made assessments of the situation for the demand of paint chemists by the Industry and the numbers that graduate from the Universities. There is and will be for some years a shortage which will limit the industry's capacities in product development and innovation.

What has CEPE done so far?

To mitigate some of the shortage CEPE has set up with the ITECH institute (Lyon, Fr) an English master course for paint chemists. It is expected that the English speaking graduates can be employed by paint companies across the EU.

In order to attract the next generation of chemistry students to this 3 year course CEPE has invited paint companies to consider the sponsoring of a student for this course. The sponsoring company funds the 3 year course and offers the student the opportunity to do his study assignments on the company's laboratory.

To compete for a scholarship the student makes a short video to 'paint him- or herself' in which the passion for paint and their ideas on the next generation of paints should come across. In the jury each of the sponsoring companies selects the student they want to sponsor.

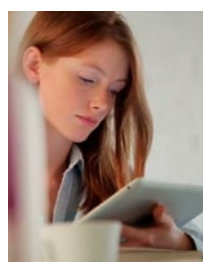
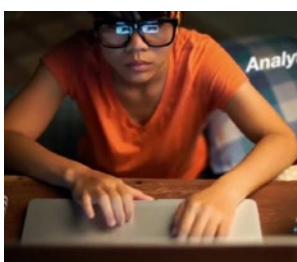
The first cohort of students started in September 2014. From the 9 students who registered, all were sponsored by 8 companies. This September, all graduated and most were hired by their sponsoring company. For the course that started in September 2015, from a total of 12 students, 6 were sponsored by 5 companies. And last year, 19 students chose for this course, from which 3 were sponsored by industry.

What will CEPE do as next steps?

The paint industry is not very visible for the chemistry student. To change that CEPE has launched a video which illustrates that behind every paint there is a can full of chemistry. The video is available on YouTube <https://youtu.be/-YBmz-0VCUM>

To promote the ITECH 3 year course a poster (being a booklet at the same time) was designed and will be distributed across the relevant Universities where there are chemical faculties.

The national associations will in the coming years have to establish more relations with students and chemistry faculties to attract students from every part of Europe and where possible link them with a local sponsor company. Ⓜ



A FUTURE IN COLOUR

A 3-minute video gives a good understanding of the range of opportunities for chemistry students.

The video is available on youtube goo.gl/dkRmy5



FURTHER INFORMATION

A folder is distributed in the relevant European universities advertising for this unique course.

TRANSPORT

Keeping products moving – safely, on time and cost-effectively

As with any manufactured product, the transport of paints, printing inks and artists' colours to distributors and customers is critical to the prosperity of our industry. Around half of CEPE members' products are classified as dangerous goods for transport, by virtue of their properties as flammable, corrosive and/or environmentally hazardous. This makes them subject to special rules, the framework for which is set globally by the United Nations in the Model Regulations and then implemented in the different transport modes through their own regulations:

- » The IMDG Code for sea transport, administered by the International Maritime Organisation (IMO)
- » The ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air
- » For land transport in Europe (both international and domestic), the UNECE agreements known as ADR (road), RID (rail) and ADN (inland waterways), which are adopted into EU legislation by Directive 2008/68/EC and its subsequent amendments.

CEPE's Technical Committee Transport is engaged in ensuring that these rules work well for our sector and that unnecessary burden and costs which do not enhance safety are avoided as far as possible. This includes maximising harmonisation and consistency between the different modes, since (despite the continued dominance of road transport within Europe) a lot of transport is now multi-modal, and a consignor often does not know the route to be taken by a shipment on its initial dispatch.

At UN and IMO level CEPE is active through the global federation IPPIC (see dedicated article), which is formally recognised as a non-governmental organisation in consultative status with these bodies.

Success in harmonisation of package limits

For many years there have been relaxations in the rules for viscous flammable liquids, such as paints and inks, which have a reduced risk of fire in the event of a transport accident. These liquids could be exempted completely from the TDG rules, or assigned to a lower packing group, when transported in packages

of up to 450 litres capacity (UN and ADR); sea transport, however, maintained a much lower limit of 30 litres. In 2016/2017 IPPIC's proposal to harmonise on the 450 litre limit was successfully adopted at IMO, for Amendment 39-18 of the IMDG Code which will come into force on 1 January 2019 and become mandatory from 1 January 2020. This is yet another positive step in reducing packaging and transport costs, following the earlier adoption of our proposal to include environmentally hazardous substances (EHS) in packages not exceeding 5 litres/kg in these derogations. The latter, along with a relaxation of tunnel restrictions for EHS, became integral provisions of ADR on 1 January 2017, after being allowed in several countries in the meantime through Multi-Lateral Agreements.

Lightening the load for environmental hazards

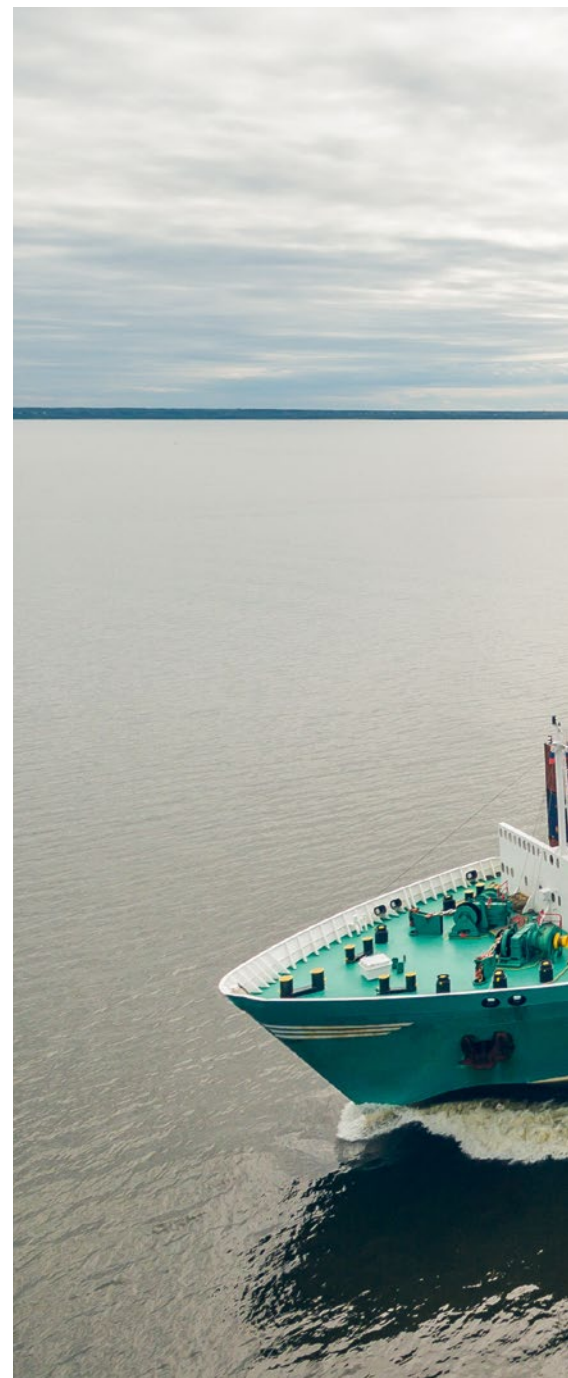
Paints, printing inks and related materials classified only as hazardous to the environment now represent an increasing proportion of dangerous goods for transport. Currently these must all be transported as 'ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID (or SOLID), N.O.S.' (= not otherwise specified), together with the technical name for the substance(s) in the mixture responsible for the hazard. This can create problems for transport documents and IT systems, including running out of characters in the relevant field. Having unsuccessfully lobbied for separate UN Dangerous Goods List entries for environmentally hazardous paints and inks in 2013, CEPE/IPPIC is now developing a proposal to simplify matters by removing the requirement for technical names, on the basis that these do not add value for emergency responders (they are not required in European land transport, where environmental hazards

must be indicated in addition to others). We are currently working on consensus-building with key delegations in the UN Sub-Committee with a view to submitting formal proposals during the current biennium (2017-2018).

Activities on several fronts

Besides its efforts to amend international instruments as above, TC Transport has been active in numerous other areas in the past year, working on (updated) guidance docu-

Paints, printing inks and related materials classified only as hazardous to the environment now represent an increasing proportion of dangerous goods for transport.



ments for members and conducting a survey of requirements by country for Dangerous Goods Safety Advisers. The committee has also focused on the problem of dangerous goods sent erroneously by post – not by our members, but by third parties who could cause damage to members' reputation if their products are involved – and is reaching out to relevant commercial associations, as well as developing guidance for members. Furthermore as a member of the informal industry

transport platform INDA, CEPE has contributed to the updating of the Industry Guidelines on Secure Road Transport of Dangerous Goods (available on the European Commission's website) – important in the light of recent terrorist events.

And finally... transport of non-dangerous goods!

ECHA's latest Guidance on Labelling and Packaging includes the long-awaited inter-

pretation that CLP labels are not required on transport consolidation packages containing products labelled as hazardous for supply but not classified as dangerous goods for transport (see Hazard Communication article). This position began life in the CEPE TC Transport back in 2011, and the committee has continued to support and promote it all the way to this successful conclusion. Sometimes patience and perseverance really do pay off. ◀



Global dealings for industry issues with a global character

CEPE normally operates within the EU scope. But for some issues it makes sense to co-operate on the global level where issues are originating from the UN or any international organisation or because the nature of the issue is not limited to the borders of the EU.

To be effective on the global level CEPE is a member of IPPIC (the International Paint and Printing Ink Council), which represents the interests of the industry on an international level and provides a forum for information exchange and cooperation on the major issues and priorities of the paint and printing ink industries worldwide. Other countries outside EU that actively participate in IPPIC are: the USA; Canada; China; South Africa; Mexico; Japan; Australia; Brazil. The 2017 annual meeting was hosted by the Canadian Paint Association in Victoria, BC.

The regular topics that are treated under IPPIC are listed here.

» **Harmonization of National or Regional Sustainability programmes**

To ensure that paint and ink companies across the globe have a common understanding of the principles and the calculation rules. Also there is exchange on paint take back programmes.

» **Nano materials**

IPPIC participates in the relevant ISO bodies to convey the voice of the paint and ink industry during the development of tests and norms around nanomaterials and their analysis.

» **Monitor the agenda of meetings of the International Agency for Research on Cancer (IARC), when paint or typical raw materials are on the agenda**

In order to deal with questionable IARC comments IPPIC monitors their agendas and recommendations.

» **Lead in paint**

IPPIC endorsed a continued participation in this UN effort, acknowledging that the use of lead in paints is regulated in the countries of the IPPIC members. The participation comprises data supply and substitution recommendations. The UN Environmental Programme and World Health Organisation's Lead Paint Alliance (UNEP/WHO LPA) maintains a dedicated website at: <http://unep.org/chemicalsandwaste/LeadandCadmium/LeadPaintAlliance/tabid/6176/Default.asp>

» **TiO₂**

Since last year the EU discussion on the classification is also discussed inside IPPIC. The matter will have consequences globally.

» **Marine Coatings**


With ships sailing over every sea and docking in any harbour they like it makes all sense to treat items with Marine Coatings from the global perspective. Anti-fouling paints and the treatment of Ballast Water Tanks (effects on the inside coatings) are important issues across the globe.

Since 2007, IPPIC has been granted the status of official consultative NGO to the IMO (International Maritime Organisation - London). IPPIC supports three IMO (sub) committees through technical input and meeting participation:

- » the Marine Environment Protection Committee,
- » the Maritime Safety Committee, and
- » the Sub-Committee on Carriage of Cargoes and Containers.

» **Transport of Dangerous Goods (TDG) and the Globally Harmonized System (GHS) of classification and labelling of chemicals**

The framework for these issues is defined on a global level by United Nations Sub-Committees of Experts. The results are then implemented into transport modal regulations and into national or regional legislation. With increasing globalisation of both business and regulations, it is more important than ever for IPPIC to be active in the international bodies to influence the rules at the top level, and to prevent disharmony which can be complex and costly for industry.

IPPIC is an NGO with consultative status at the UN Economic Commission for Europe, and as such participates actively in the Sub-Committees of Experts on TDG and GHS which meet in Geneva twice a year, as well as many of their delegated correspondence working groups. Much of this representation is provided by CEPE, whose Director Product Regulations is the IPPIC Head of Delegation. The Model Regulations and GHS (which set the framework for legislation in the EU and elsewhere) are updated every two years, and the twentieth and seventh revised editions respectively have been published in 2017. IPPIC continues to engage actively on various topics of relevance for our sector in the 2017-2018 biennium. For more details of activities see the sections on Transport and Hazard Communication in this annual report. 



ECOBIOFOR PROJECT

Organic solvents are used for many industrial or do-it-yourself applications. Either to adjust a viscosity or to clean surfaces from greasy dirt. The paint industry is the biggest user of organic solvents. Today these solvents are produced via several steps from mineral oil, a fossil source that will see depletion someday.

From September 2014 until November 2016 a Consortium of Research Institutes, SMEs and their associations ran an EU funded project (FP7) with the objective to synthesize organic solvents from bio-renewable sources and apply for the processing the main green chemistry principles like:

- » Use of non-toxic reactants
- » Use of renewable stock
- » Use of heterogeneous catalyst
- » Use of mild conditions
- » Number of steps as low as possible
- » Waste minimization

The main outcomes are here summarized.

More detailed outcomes of the project can be found at the webpage www.ecobiofor.eu

THREE BIO-BASED SOLVENTS WERE SYNTHESIZED & CAME CLOSE TO THEIR PETROL BASED EQUIVALENTS

Here the focus was on 'drop ins'. Finding alternatives to the fossil based solvents that could simply be added in the same amounts in the paint formulations. The chemical synthesis according to Green Chemistry resulted in:

- » Bio-ethyl acetate, produced from bio-ethanol by esterification using an ion exchange resin as an heterogeneous catalyst, can be used in ANY solvent-borne paint formulation.
- » Two Bio-butyl acetates, one synthesized from bio-butanol (esterifi-

cation) and one prepared through a co-production pathway from acetic acid (produced during the production of bio-ethyl acetate) and bio-butanol. They can be used in solvent-borne formulations where the presence of a few percent butanol is not a problem.

- » Bio-butyl glycol produced from bio-butanol by etherification in the presence of an ion exchange resin, is suitable as coalescent for ANY water-borne paint formulation.

A BIO-BASED REACTIVE DILUENT THAT WOULD ALLOW TAKING VOC OUT OF THE PAINT FORMULATION

To reduce the VOC emission of a paint the project looked for a so-called reactive diluent. The biotech synthesis (enzymatic transformation) with for the main part on bio-based raw materials resulted in:

- » Allyl reactive diluent from FAME based on Used Cooking Oil
- » Allyl reactive diluent from FAME based on Camelina oil

Both could be added to a suitable paint (an alkyd-urethane) and replace the solvent (3.5%).

Consortium members

The ECOBIOFOR Consortium included 11 partners:

3 RTD performers: TECNALIA (Spain), IUCT (Spain) & INPT (France).

5 Associations: asebio, P-Bio, the Swiss Biotech Association, Procoat and CEPE

3 companies: DUBOIS (France), a producer of biobased materials, CASTELLANO (France) & IRURENA (Spain) as paint companies

CONSORTIUM MEMBERS

RTD PERFORMERS



ASSOCIATIONS



COMPANIES



SERVOWOOD PROJECT

From January 2014 until December 2016 a Consortium of Research Institutes and SMEs and their associations ran a project with the objective to improve the predicting of the life time of coatings on wood. From a total of 3800 panels of coated wood the responses were evaluated after these panels had been submitted to a variety of doses (amounts) of typical weather parameters (UV light; water and temperature). Both in real outdoor conditions as well as in accelerated weathering in the laboratory. More detailed outcomes of the project can be found at the webpage www.servowood.eu.

Identifying benefitting audiences / stakeholders

The results from this project are not directly about new or improved products. The scope of this project was restricted to better knowledge of how exterior wood coatings degrade. The outcomes will then enable new steps in product improvements. The stakeholders were identified by assessing if they would be getting *something new in fulfilling their job*.

This led to the following stakeholders:

- » Wooden window frame manufacturer
- » Architect
- » Paint manufacturer
- » Maintenance decision maker / building owner

FOR THE MANUFACTURER OF WINDOW FRAMES

The **individual manufacturer** may in his product proposition to the market:

- » revise and extend the service life (means lowering the maintenance frequencies) after consultation with his paint supplier.
- » offer a smart and scientific way of an early warning to start maintenance before visual coating damage occurs by embedding Moisture Indicator Sensors (MIS) in the final exterior wooden article.

FOR THE ARCHITECT

The **individual architect** will:

- » have more reasons to look at wood for exterior use as a result of the greater clarity on maintenance needs.
- » have a greater confidence in prescribing a type of wood combined with a type of

coating taking the local climate into consideration.

FOR THE PAINT MANUFACTURER

The essence of this project was studying the degradation of coatings that results from the exposure to different doses of weather influences like water, temperature and sunlight. The resulting changes in physical characteristics were observed and linked to the coating's capability to protect the wood. A host of data has been gathered for variables like wood surfaces and coating qualities.

From this the **individual paint manufacturer** will:

- » have a set of new tools by which he can, in a shorter timeframe, predict the service life of his paint.

The scientific know-how obtained through this project will be at the basis of justifying the use of the new tools. He can first use the toolbox to establish how his current portfolio of paints performs;

from there he can embark upon using the new tools for further paint improvements.

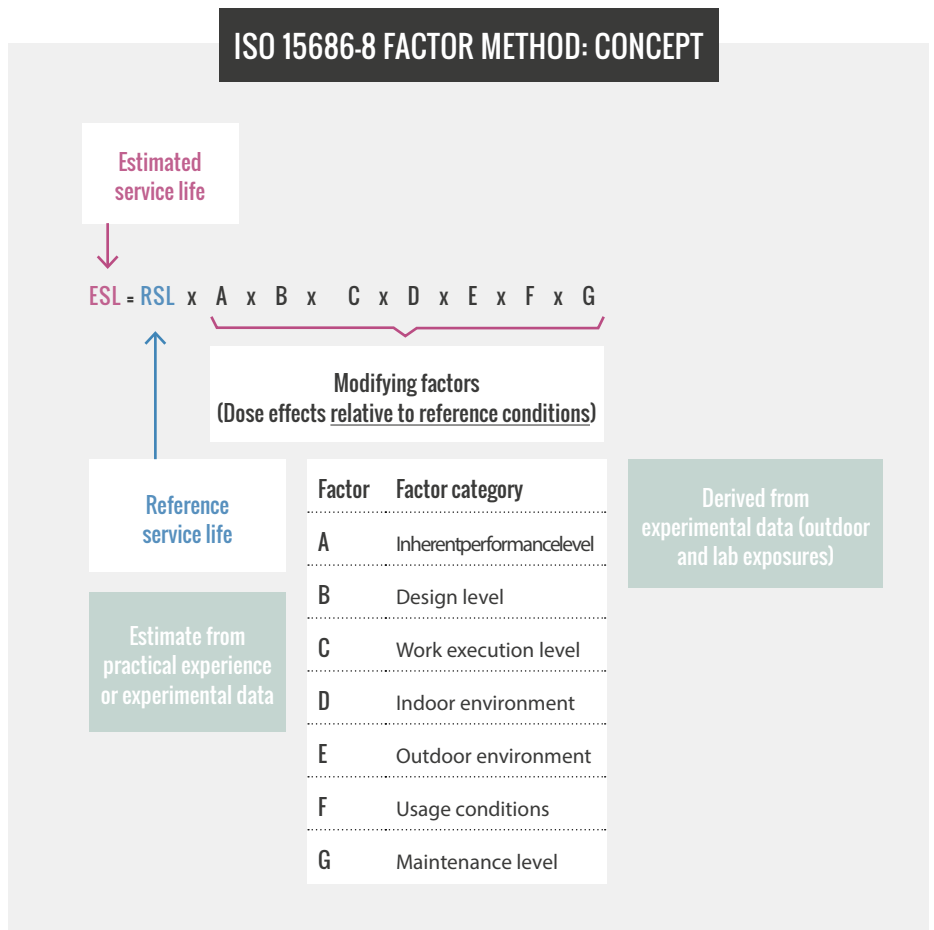
- » Have data that form the basis for a better correlation between artificial and natural weathering.
- » Have a more reliable prediction on the estimated service life of the supplied paint through modelling via a factor method based on the established formula (*see figure hereunder*)

see a more robust European Norm for establishing exterior durability (input of precision statement into EN927-6)

FOR THE MAINTENANCE DECISION MAKER / BUILDING OWNER

The **individual maintenance inspector** will:

- » be able to make better prediction of maintenance intervals; even more so if he can make use of the above introduced MIS.
- » lower his costs for inspections and the real maintenance (in which scaffolding is often



LCA SCREENING STUDY ON COIL-COATED STEEL FOR OUTDOOR USE



The screening LCA study started in February 2016 by a dedicated group of CEPE Coil coating experts. The screening was completed in February 2017 and since then the group is working on the possible communication activities related to the study.

Background

A substantial part of coil coatings find their application in the construction industry with coated façade claddings. The applied coating

functions as a surface improvement to prevent corrosion and improve durability of the external cosmetic appearance. The CEPE coil coating members agreed that a Life Cycle Assessment (LCA) should be done for the claddings application.

As preparation for this project, CEPE has defined a list of 7 typical coil coating systems for outdoor applications on steel to be evaluated.

The aim of the study was to show:

» The hotspots in the value chain (and thereby

establish the role of a coil coating in the life cycle of cladding panel into a building)

» The differences between 7 systems that are most representative in the market.

The functional unit in the study is 1 square meter of cladding panel applied in a building. The system (type of coatings, layer thickness and pre-treatment method) is the key parameter that determine the environmental impact of the fabrication phase and the durability of the cladding panel: *(see figure)*

Conclusions

The main conclusions of the study are the following:

- » Steel sheet production and other raw material production is the dominant factor over the life cycle.
- » the environmental impact is the lowest for coatings with the longest durability

CEPE has defined a list of 7 typical coil coating systems for outdoor applications on steel to be evaluated.

DIFFERENT TYPES

Pre-treatment types	Primer coatings types	Top coating types	Back coatings types
Pre-treatment 1 (Chromated)	Primer coating 1 (Polyester chromated)	Top coating 1 (Polyester)	Back coating 1
Pre-treatment 2 (Chrome free)	Primer coating 2 (Polyester chrome free)	Top coating 2 (Polyurethane)	
	Primer coating 3 (Polyurethane chrome free)	Top coating 3 (PVdF)	
		Top coating 4 (Plastisol)	

EMERGING ISSUES

MICRO-PLASTICS IN THE MARINE ENVIRONMENT

What is the issue?

In checking water quality, marine research institutes have found small plastic particles. Because of their size (smaller than 5 millimetre) and non-biodegradable character such micro-plastics could end up in fish and therewith eventually in the human food chain. This could lead to negative health impacts. Although there is some link with the issue of 'the plastic soup' (which refers to the plastic articles like bags, bottles etc. that have been found floating in the oceans) it should not be mistaken with it.

In The Netherlands, Denmark, Norway, Belgium, UK and Germany this topic gets political attention. The pollution of seas and waterways with micro-plastics is considered a major threat to sea life and humanity consuming fish or other sea creatures.

Institutes or consultants in these countries have written reports on sources and possible reduction measures. Some reports come with very rough and high estimates of volumes of polluting micro-particles.

Microplastics are defined from size being less than 5 mm in diameter. They are split in:

» primary micro-particles; intentionally added to products and emitted during use (e.g. leached)

The cosmetics industry adds small plastic beads to formulated products that are used for skin scrubbing. These beads can be emitted after rinsing under the tap.

» secondary micro-particles; irregular shaped particles that emit as a result from 'wear and tear' like:

Tyres; rubber particles from wear off from driving on the road

Textiles; synthetic fibres that would loosen during a washing operation.

Dried paint layers; degradation particles resulting from sanding outdoor old paint layers (sanding dust)

EU's efforts

The EU prepares for a Plastics Directive. A part of this will deal with micro-plastics. To get a better understanding of the micro-plastics issue (sources, size and possible reduction measures) the European Commission hired consultants who are assigned to come with a report that will form an input into the political discussion.

A first survey was done in April 2017 on the primary micro-plastics. This comprised the intentionally added micro-beads.

And until November the consultant investigates the secondary micro-plastics.

The topics that get attention in this one are:

» Emission at source; in which outdoor situations will there be wear and tear and how much

» Pathways to water; assumptions on how much of the emitted volume would really reach waterways.

» Effect of cleaning water at sewage water

treatment installations.

» Policy options that could lead to a reduction of the emitted volume.

What is CEPE's opinion?

And what will CEPE do as next steps?

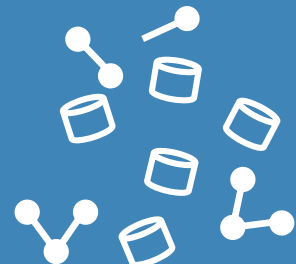
CEPE has established a Task Force where it tries to get its own perspective of the volumes and the reasoning on the pathways and the policy options. This homework will help us respond to the EU surveys and give critique on some of the reports as published by institutes.

For the intentionally added micro-plastics CEPE submitted to the EU consultant that the paints are only a very small source. The only emission is in fact the cleaning of rollers and brushes from those paints that contain such micro-beads (a relatively low percentage of the deco market).

CEPE is at this moment in contact with the EU consultant for the survey on secondary micro-plastics.

Internally CEPE addresses the paint segments that have potential to emit 'wear and tear' from the dried paint films in outdoor conditions. The 'wear and tear' can come from the degradation of the paint film or from human activity (like sanding or blasting).

The suspected contributing sectors are deco, marine, protective (bridges etc.) and road-marking.



Gaps in this topic

There are still many questions not answered on this issue. To name the most important:

- » The definition of micro-plastics is not clear and needs further thought; especially if the particle is not composed of just plastic. Also the lower size limit is not established.
- » The pathways of secondary micro-particles to waterways.
- » The identity of micro-particles as found in

the samples taken from water surfaces. Are the polymers coming from the resin technologies we use?

- » The quantification of the risks. What are the effects on fish species when swallowing micro particles?

It is far too early to speak about legal instruments that would address any limits or mitigation as long as the actors and the

activities that lead to this problem have not been unambiguously identified.

CEPE will certainly oppose policies that are based on one dimensional solutions, like solving one problem without taking the accompanying negative effects like for sustainability into account (for example paints without polymeric binder). A holistic approach is needed.

CIRCULAR ECONOMY (CE)

A circular economy is one that is restorative by design, and which aims at keeping products, components and materials at their highest utility and value, at all times.

The EU published its Circular Economy Action Plan in December 2015. The aim of the package is to improve world competitiveness and induce innovation through the creation of a circular economy, along with environmental benefits such as reducing greenhouse gases.

It outlines five main areas of action, which are: production, secondary raw materials, innovation & investment, consumption and waste management. The priority sectors are: plastics, food waste, critical raw materials, construction & demolition and biomass and bio-based products. Paint sits in three of these priority sectors- plastics, critical raw materials and construction. To printing inks the de-inkability of packaging will be in discussion. The printing ink sector EuPIA has meanwhile

lined up with other stakeholders to discuss their positions.

This CE action plan will include:

- » Proposal for a directive amending Directive 2008/98/EC on waste (waste framework directive)
- » Proposal for a directive amending Directive 94/62/EC on packaging and packaging waste

This will make CEPE look closer into the waste issue in the year to come. ◀



EuPIA ANNUAL REPORT 2017

EuPIA, the European Printing Ink Association, working under the umbrella of CEPE, represents and protects the common interest 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 2016

EuPIA publishes market statistics on an annual basis. The data can be accessed via the EuPIA website at eupia.org, section publications - statistics.

The aggregated figures displayed in the charts below summarize

- » Sales value per country total
- » Sales volume and value per category for Europe total

The figures comprise domestic ink data collected for 30 countries or country groupings in Western and Eastern Europe and represent the activity of 29 EuPIA members participating in the statistics.

It is estimated that this represents about 90% of the total European market.

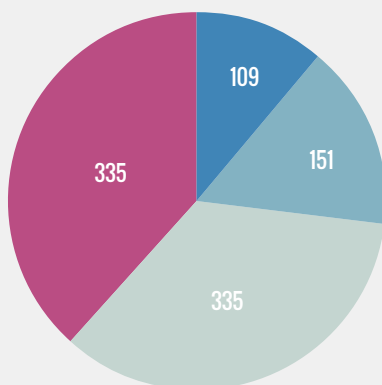
The global ink categories for which the aggregated figures are displayed are defined as follows:

- » **Liquid inks water borne** – this includes flexo and gravure water borne inks, technological varnishes, extenders, primers, and overprint varnishes
- » **Liquid inks solvent borne** – this includes flexo and gravure solvent borne inks, 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** – all other inks except screen ink sales which are not included in these statistics



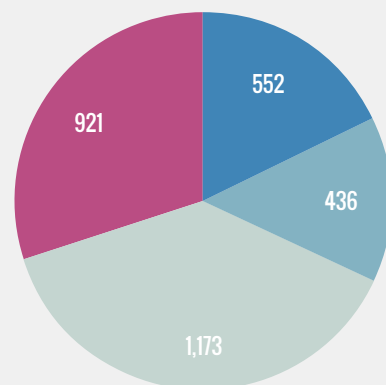
MARTIN KANERT
Executive Manager EuPIA

SALES VOLUME FOR 2016 IN 1,000 TONS



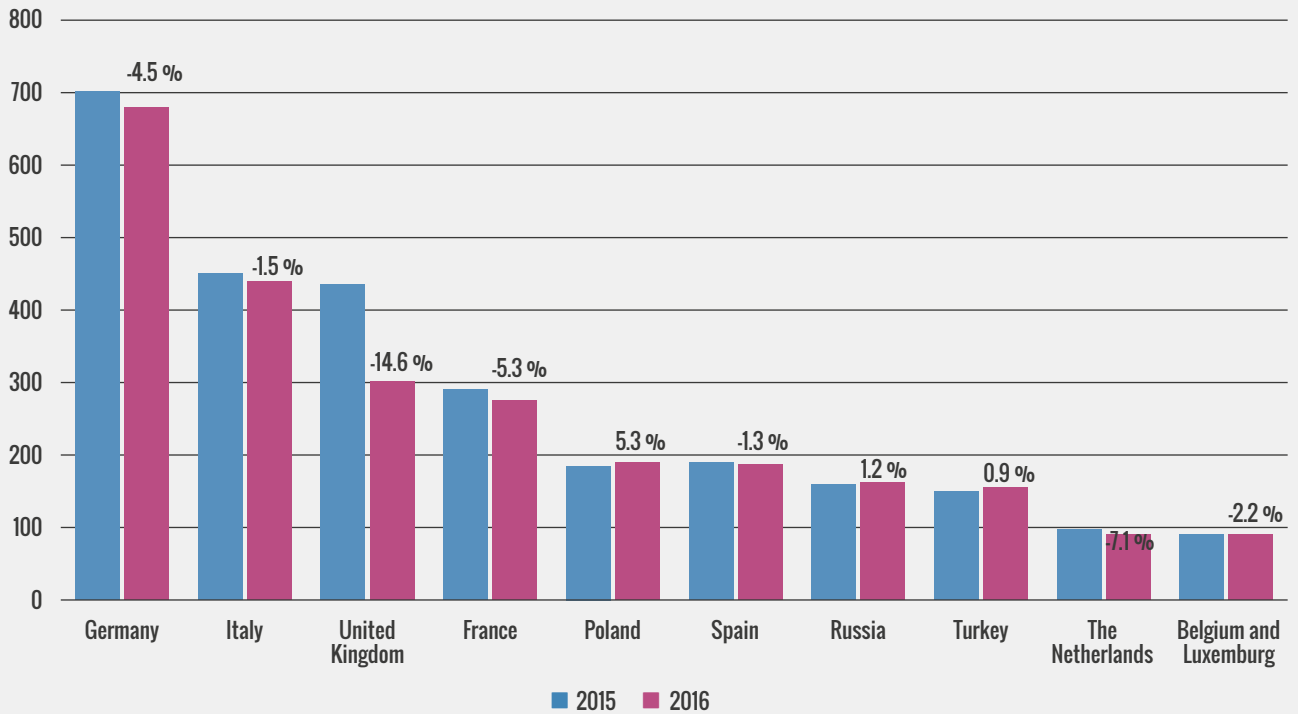
■ All other inks ■ Solvent borne liquid inks
■ Water borne liquid inks ■ Oil based inks

SALES VALUE FOR 2016 IN EUR MILLION

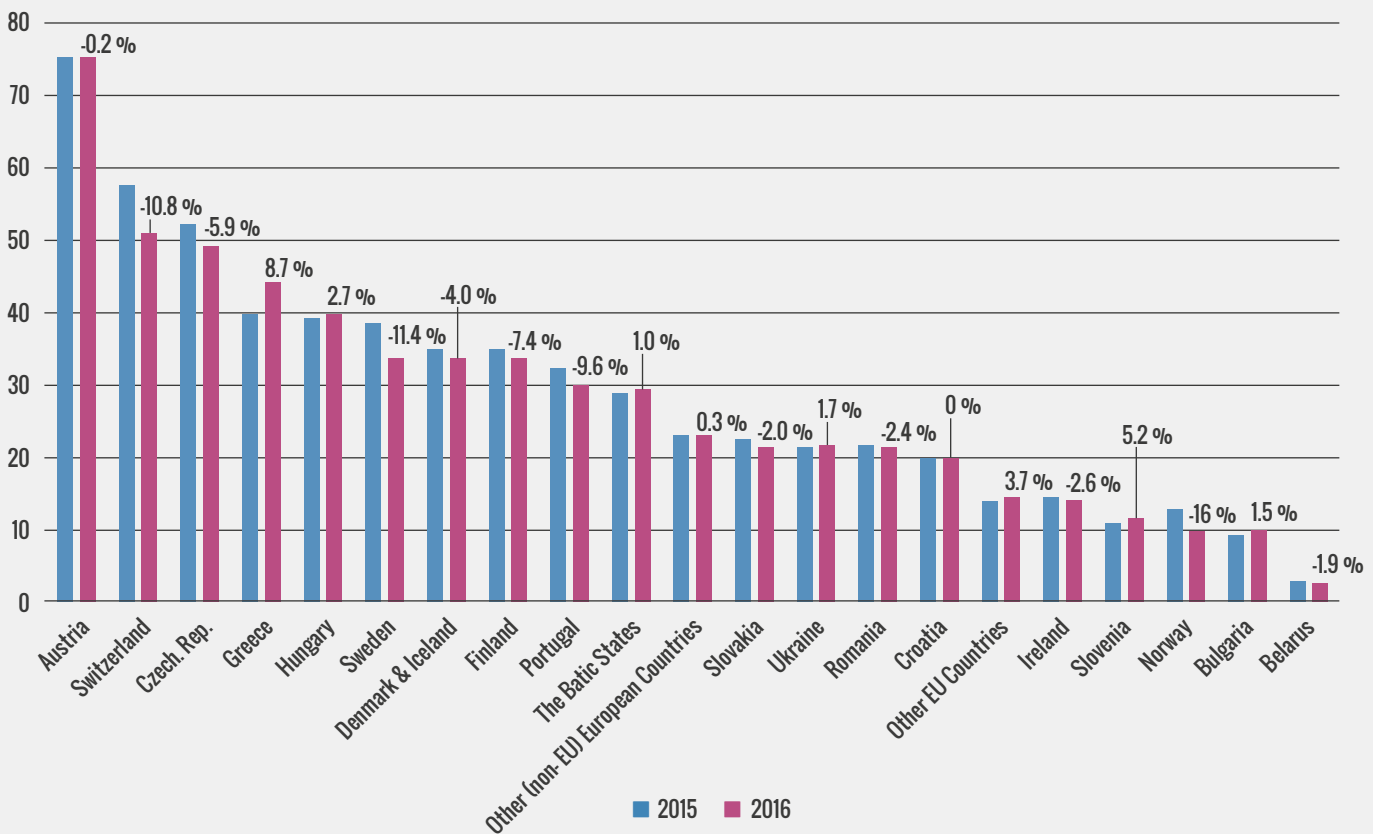


■ All other inks ■ Solvent borne liquid inks
■ Water borne liquid inks ■ Oil based inks

SALES VALUE BY COUNTRY 2015 TO 2016 IN EUR MILLION



SALES VALUE BY COUNTRY 2015 TO 2016 IN EUR MILLION



READJUSTING FOR SUCCESS



The market for printing inks will show more demand for individual solutions and lower volumes. But there are also opportunities for printing inks producers. By Damir Gagro.

The printing inks industry is still struggling. The publication sector continues its downward trend. So it is no wonder that the EuPIA 14th Annual Conference, which took place in Marbella, Spain, was a focus event on the packaging market. This sector is promising and enables possibilities. But the printing inks business will remain challenging.

With more than 90%, the EuPIA statistics comprise a reliable share of the entire European market. The results can be viewed as trusted and reliable. The sales volume in 2016 reached a total of 962,000 tonnes. Oil-based inks (38%) and solvent-borne liquid inks (35%) account for the largest share in terms of volumes. Water-borne liquid inks had a share of almost 15.7%. The sales value was at EUR 3.05 billion with solvent-borne liquid inks having the largest share (38.5%) followed by oil-based inks (30%). Water-borne liquid inks accounted for some 14% of the entire sales volume in 2016. Compared to last year the printing inks industry posted -0.7% in volumes and -3.8% in value in 2016. However, the decrease slows down and the industry is showing a slow recovery. Publication inks posted a decrease of -3.8% in volumes and -8.6% in value in comparison to the 2015 figures. Packaging inks reached an increase of 2.4% in volume while the value dropped by 0.5%. The situation will remain challenging for the industry, noted Herbert Forker, EuPIA's new Chairman. The issue with tight supply and increasing prices might become a burden for the industry.

PACKAGING SECTOR WITH BRIGHT PROSPECTS

The first day of the conference featured presentations from the packaging industry's view. And it showed why the conference has put the focus on that particular sector. Thomas Reiner, Berndt+Partner, who served as moderator and has an experience of over 20 years in the packaging industry, stated that there are 3.5 billion packaging units in the market. Alvise Cavallari of the food giant Nestlé explained during his presentation that the food giant features more than 2,000 brands in its portfolio. The annual expenditures on packaging materials is worth EUR 7 billion and the volume of packaging materials amounts to 5.3 million tonnes. "All these packages are printed", he said. Cavallari emphasized the importance of printed packages. "Printing is communication, and we are witnessing an increase demand for communicating the messages to different target groups", he continued. As examples he mentioned the evolving middle class in emerging geographies of the world and the aging population in the mature markets. But he also

stressed that packaging will be simplified. This development will affect the printing inks industry as lower volumes might be needed. Belal Habib of Pladis Global also stressed the two fundamental functions of a packaging: "It has to jump of the shelf and deliver an experience for the customer." In regard to packaging he raised the question "what is the industry's Uber or Airbnb?" These two companies have changed the game in transportation and accommodation. Habib noted that companies will have to make use of latent, existing assets by connecting them with smart apps.

DIGITALISATION AND INDIVIDUALISATION ARE BIG TRENDS

Also the press manufacturers demonstrated in their presentations that importance of digitalization is increasing. Digital print for packaging is becoming mainstream, said Jan Van Daele of HP Graphics Solution Business. This is also in-line with a survey conducted by business consulting firm Berndt+Partner. The online survey comprised answers of 52 EuPIA members and 358 responses from EuPIA customers. Both groups of respondents identified the increasing cost pressure and digitalisation as the biggest business trends having impact on the packaging industry. According to the survey results, the packaging types with the highest growth rates is flexible packaging. This was also mentioned by Nikolaus Wolfram of Constantia. He estimates the global demand for this type of packaging has reached EUR 70 billion in 2016. The emerging markets account for more than 60% of that amount. Forecast are predicting that flexible packaging will double by 2025.

Another huge trend in the packaging industry is individualisation. Many brands have started printing personal names on their goods, such as "Coca Cola" on bottles or "Nutella" on jars. Julian Villa-nueva of IESE Business School said as commercial brands are becoming less important to consumers than their "own" brand. Individually designed goods and packages will therefore gain importance. However, this will also mean more jobs with lower volumes for press manufacturers and hence lower volumes of printing inks will be needed for these types of jobs. This will make forecasting even harder and require a higher flexibility of printing inks producers. They will have to manage high and low volume businesses and adapt faster to changes as well as trends to remain competitive. But the potential is out there to capitalise opportunities.

(was published in ECJ 05/2017)

Announcement of the 15th EuPIA Annual Conference in 2018

The next Annual Conference will be held on 26th / 27th April 2018 in Hamburg (Germany).

PRINTING INKS AND VARNISHES APPLIED ON FOOD CONTACT MATERIALS

EU Commission and European Parliament activities regarding food contact materials for which no harmonised rules exist (“non-plastic food contact materials”)

Food Contact Materials must be manufactured such that they do not transfer their constituents to 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 specific legal provisions exist for plastics, regenerated cellulose film, ceramics, active and intelligent materials and recycled plastics.

In the absence of specific EU measures, Member States may maintain or adopt their own national provisions on food contact materials, which are likely to differ from one Member State to the other. Such differences introduce inconsistencies in the approach to regulating food contact materials and have the potential of hindering the free movement of those materials in the internal market.

Therefore, in 2012, the European Commission had started an initiative to check the necessity and options to regulate non-plastic food contact materials, and summarized its views in a so-called “roadmap”. Subsequently, the Commission consulted Member States and industry for their opinions. EuPIA and many other trade associations took part in the consultation process and identified “printing inks” and “paper & board” as materials for which EU provisions should be established with priority. In the latter part of 2014, the European Commission’s Joint Research Centre (JRC) started to carry out a study aimed at providing a comprehensive overview of the current situation concerning non-plastic food contact materials. The study entitled “Non-harmonised food contact materials in the EU: Regulatory and market situation” was published in January 2017, and is available at goo.gl/Snrzi3

It maps the industry supply chain and collects existing legal provisions on Member State level as well as industry self-regulations for these materials. EuPIA’s contribution to the study is well reflected. The study reveals a number of deficiencies in ensuring consumer safety arising from the lack of harmonized rules in the European Union, thus suggesting setting harmonized rules for those food contact materials for which such rules currently do not exist.

In October 2016, the European Parliament adopted a Resolution on the implementation of the Food Contact Materials Regulation (EC) No 1935/2004 (<http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+TA+P8-TA-2016-0384+0+DOC+PDF+V0//EN>). The Resolution calls for harmonised rules for all food contact materials, and points out that in doing so, priority should be given to paper and board, varnishes and coatings, metals and alloys, printing inks and adhesives.

EU Commission announces its intention to regulate printed food contact materials – Germany suspends the adoption of its draft “printing ink ordinance” until further notice

On 5th July 2016, Germany notified to the European Commission the draft of the 21st ordinance amending the German Consumer Goods Ordinance (the so called “printing ink ordinance”) pursuant to Directive (EU) 2015/1535. During the standstill period, which expired on 6th Oc-

tober 2016, eight EU Member States had expressed their concerns by “detailed opinions”. Two EU Member States and the European Commission had provided comments.

As a result, and obviously in line with the analysis of the JRC Report and the European Parliament Resolution, the European Commission took ownership of the dossier, and announced its intention to adopt new Union legislation on printed food contact materials, including printing inks (“pFCM measure”). As this harmonized legislation is planned to be adopted in 2018, work on drafting the legislation is high on the agenda of the working programme for 2017 of the competent Directorate General for Health and Food Safety (DG SANTE). Meanwhile, Germany declared that it will suspend the adoption of the draft “printing ink ordinance” until further notice. Germany will closely observe the EU Commission’s activities. If it turned out that there is a considerable delay in the planned legislative process on EU level, then Germany announced to continue with its national initiative. The German Federal Institute of Risk Assessment (BfR) anyhow continues with the evaluation of substances used in the manufacture of printing inks for food contact materials, and invites the raw material suppliers to the ink industry to continue submitting related substance dossiers. EuPIA is supportive of the BfR’s invitation.

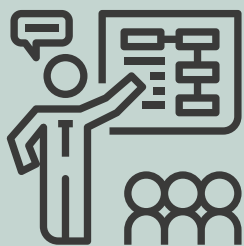
The EU Commission has already started making themselves familiar with the complex processes involved in the manufacture of compliant printed food contact materials. In February 2017, they launched a survey with a particular focus on how information in the supply chain is managed. In March 2017, they invited stakeholders to participate in a consultation on rules concerning printed food contact materials, by which they seek to obtain an overview of the rules used by members of the food packaging supply chain to ensure the safety of their products under the Framework Regulation. EuPIA contributed to both these activities.

As the Commission expressively invited industry to cooperate in the development of the pFCM measure, EuPIA began to develop its ideas how a future EU measure could look like. These ideas were put together in a “thought starter” which received the full support of the members of the Packaging Ink Joint Industry Task Force (PIJITF), and will be discussed with the Commission and Member States.

Swiss Consumer Goods Ordinance: provisions for food packaging inks

Switzerland issued a revised version of its Ordinance on Materials and Articles (SR 817.023.21), which came into force on 1st May 2017. Section 12 sets out the provisions specific to food contact material inks. Substances which only may be used in the manufacture of printing inks in scope of the Ordinance are now listed in Annex 10. A transition period of four years applies to the new section 12, as laid down in Art 95 (2) of the superordinate Lebensmittel- und Gebrauchsgegenständerverordnung (LGV) SR 817.2. The Swiss authorities provide an English translation of the new Annex at <https://www.blv.admin.ch/blv/en/home/gebrauchsgegenstaende/materialien-in-kontakt-mit-lebensmitteln/verpackungen.html>.

The Swiss Authorities had approached EuPIA requesting clarification of the toxicological status of some of the listed substances. For the majority of the substances consensus could be reached in joint meetings between the Swiss authorities, EuPIA and the relevant associations of the raw material supply industry: These substances are retained in the Annex 10. As this piece of legislation is still quite complex and can be prone to misinterpretation, EuPIA provides an updated guidance addressing the most frequently asked questions. The document can be found on the EuPIA website, at http://www.eupia.org/uploads/tx_edm/2017-06-07_Swiss_FCM_Ordinance_-_EuPIA_Q_A_regarding_non-DFC_FCM_Inks.pdf



Non-Intentionally added substances (NIAS)

Printing inks and coatings for food contact materials may contain substances that are not used intentionally. These substances may be impurities in the raw materials used or reaction intermediates formed during the production process of ink raw materials, or decomposition or reaction products formed during the ink manufacturing, the printing and the packaging/filling or storage. Such substances are commonly referred to as Non-Intentionally Added Substances (NIAS).

There is an increased focus of legislators, control authorities and customers on the appropriate risk management of NIAS. To this end, EuPIA has established a NIAS Risk Management Task Force, which in January 2017 finalised the “EuPIA Guidance for Risk Assessment of Non Intentionally Added Substances (NIAS) and Non Listed Substances (NLS) in printing inks for food contact materials”. The document defines a harmonised approach how to assess NIAS in the printing ink industry and provides guidance on this difficult topic to EuPIA members. In order to provide members with practical experience, EuPIA offered members a training course on 26th/27th April 2017. The training course was very well attended by over 20 participants on each day.

EUPIA TECHNICAL COMMITTEE

Technical issues and non-food applications of printing inks fall under the remit of the EuPIA Technical Committee (ETC) and its subsidiary working groups, Operational Safety & Risk Assessment (OSRA), Labelling & Safety Data Sheets (LSDS) and the Task Force Paper Recycling.

Substance management

In autumn 2016 ETC published the third edition of the EuPIA Exclusion Policy for Printing Inks and Related Products, along with an updated internal Explanatory Note for members on the Policy. The new edition of the Policy contains clarifications on the intentional use of substances subject to the Policy, as well as information on the transitional arrangements applying to new members of EuPIA (who are expected to commit to the Policy in due time). The Explanatory Note, meanwhile, provides guidance to members on the requirements for substitution of excluded substances and for application for an exemption under the Policy.

To date there remains just one ‘Group A’ exemption listed in Annex 2 of the Policy, for formaldehyde in encapsulated scent varnishes; in March 2017 ETC agreed an extension of this exemption for a minimum of one year. In addition to this, one exemption has been reported

under ‘Group B’ using the self-assessment procedure. The Policy is perceived to be functioning well and continuing to preserve and enhance the image of EuPIA as a responsible industry.

An important substance has recently fallen within the scope of the Exclusion Policy, thanks to a harmonised classification opinion from ECHA’s Risk Assessment Committee. 2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone (BDMBP), a photoinitiator widely used in UV-curing printing inks, has been classified as toxic for reproduction Category 1B and will be included in an amendment to the CLP Regulation in 2018. EuPIA co-funded a review of the toxicological evidence by an independent expert, who concluded that the classification is justified. Given the importance and ubiquity of this photoinitiator, substitution is unlikely to be possible in the short term without causing major disruption to energy-curing printing technologies, therefore EuPIA is conducting a robust risk assessment on sector level to establish the conditions of safe use throughout the value chain. This will support members in applying the exemption procedure and communicating to customers until it is technically feasible to replace the substance.

ETC closely monitors a number of other ‘substances of interest’, and EuPIA representatives participate in CEPE task forces related to titanium dioxide, diisocyanates and biocides (see articles elsewhere in this report) to ensure that the interests of the ink industry are properly addressed. The efforts of EuPIA were also decisive in achieving the successful outcome for HDDA, which was not identified as a Substance of Very High Concern under REACH on the basis of its skin sensitising properties. As an important non-food application for printing inks, ETC also monitors developments in the Toy Safety Directive 2009/48/EC. The impact of a proposed reduction in migration limits for aluminium is being assessed; many pigments have high Al content.

Safe packaging for cosmetics

Since 2014 EuPIA has participated in the development of cross-sector industry guidance on information in the supply chain on packaging for cosmetic products. The approach makes use of available information on food contact suitability, combined with a guidance list of ‘disclosable substances’ (such as skin sensitisers), to communicate adequate information about the packaging to cosmetic safety assessors.

Following the results of a limited pilot in 2016, the draft guideline has been improved and will undergo a much wider trial (involving all Cosmetics Europe members) commencing in 2017. Meanwhile EuPIA maintains its recommendation to members to supply FCM inks also



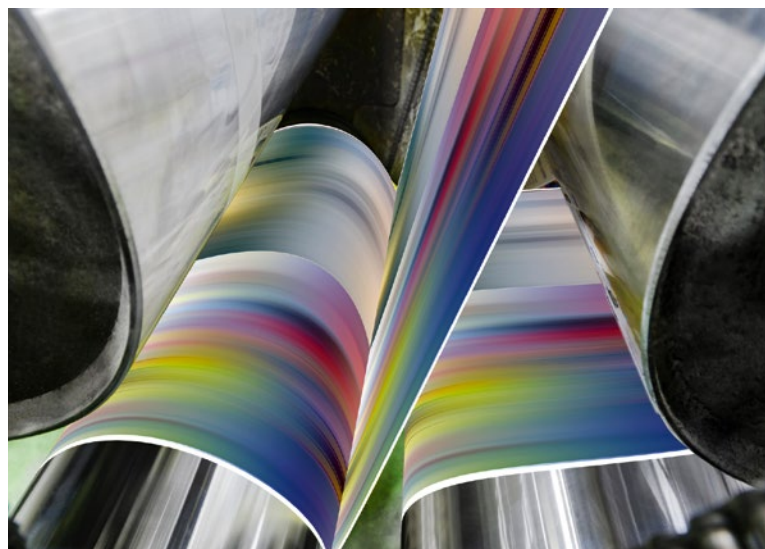
for cosmetic packaging (in the absence of specific product development). EuPIA will also continue to update its list of disclosable substances in light of developments in relevant legislative lists.

Sustainability of printing inks

Questions are increasingly asked by customers about the environmental footprint of inks and printing techniques. Instead of generating eco-footprints for individual inks, which could lead to inappropriate comparison between different ink technologies, ETC established a 'generic reference ink' representative of the total market and conducted a Life Cycle study applying the CEPE tool and methodology (see Sustainability article for more information). In February 2017 ETC published a communication leaflet, available on the EuPIA website, to support converters in making their own Life Cycle Analyses and assessing the contribution of the ink to the overall environmental footprint. A more detailed internal document was also published to help EuPIA members in answering queries from downstream users.

EuPIA supports the European Paper Recycling Council (EPRC)

The European Paper Recycling Council (EPRC), formerly European Recovered Paper Council (ERPC), was set up as an industry self-initiative in November 2000 to monitor progress towards meeting the paper recycling targets set out in the 2000 European Declaration on Paper Recycling. Since then the commitments in the Declaration are renewed every 5 years. In 2017 the ERPC committed itself to meeting and maintaining a voluntary recycling rate target of 74% in the EU27 plus Switzerland and Norway by 2020 as well as qualitative targets in areas such as waste prevention, ecodesign, and research and development. In 2017, Members of the ERPC are ACE, CEPI, CITPA, EMFA, ERPA, ETS, FEPE, INGEDE and INTERGRAF. Supporters are Afera, EuPIA, FINAT and RadTECH Europe. The European Commission, DG Environment and DG Grow, are permanent observers to the ERPC. A more user-friendly website has been created and includes additional information on the EPRC's activities and more on its plan to meet its new paper recycling rate target of 74% by 2020: <http://www.paperforrecycling.eu>. In January 2017, the EPRC issued a revised deinkability scorecard which now includes an annex listing exemptions to the deinkability test. With this annex, the widely-used deinkability scorecard takes account of those printing technologies and material combinations that are sure



to deliver good deinkability results, based on past experiences. Testing remains a requirement for processes and material combinations for which there is not enough experience on their deinkability behaviour. The annex will be subject to future revisions based on new data.

Commitment to safe workplaces

The OSRA working group continues its mission to support member companies and customers in operating at the highest possible level of plant and occupational safety, by producing guidelines, alerts and best practices. Publications in the past year include a guidance note/poster on fork lift truck safety distances and information on stability tests for industrial nitrocellulose. Work is ongoing on new or updated guidelines including such varied topics as machinery hazards, storage racking, flammable liquids and more.

OSRA also continues to publish its popular Safety Alerts/Flashes to spread learnings and avoid similar incidents; fires have been a recurring theme over the past year. One highly topical Safety Flash was on the subject of travelling with lithium batteries, such as are used in smartphones and laptops.

In addition to the above outputs, OSRA also provides expert input to other EuPIA/CEPE groups such as the Isocyanates TF, which is developing content for the training modules that will be required for professional users of these materials under the proposed restriction.

Ink-specific hazard communication

EuPIA's LSDS group continues its more focused remit on ink-specific labelling and safety data sheet issues. In 2017 it has a key role in identifying appropriate worker exposure descriptions and Safe Use of Mixture Information documents for energy-curing products, which do not fit readily into the default EuPIA SUMIs due to the nature of their hazards. (See REACH article for more information.)

Printing Inks and Circular Economy

Last but by no means least, EuPIA monitors discussions on the Circular Economy in Europe, triggered by the Commission Communication "Closing the loop - An EU action plan for the Circular Economy", published in December 2015. As the recycling targets for paper based products may affect the technologies for the recycling of paper, the scope of the EuPIA Task Force "Mineral Oils in Publication Inks" has been expanded to now also include general aspects of paper recycling vis-à-vis requirements which may result from the new circular economy policy. To align with its new task the Task Force "Mineral Oils in Publication Inks" has been renamed the "Paper Recycling" Task Force. 📍

ARTISTS' COLOURS

After re-branding itself as the European Artists' Colours Association EuACA in 2016, and launching its dedicated website www.artists-colours.org, CEPE's Artists' Colours (AC) sector group continues to work together on the important issues facing the industry and on enhancing the image of the sector collectively.

ADDRESSING THE TECHNICAL CHALLENGES FACING ARTISTIC MATERIALS


The AC Technical Committee comprises a strong group of industry experts and meets twice per year to address key technical issues from the specific focus of artists' colours. A new chair and vice-chair were elected in 2017 to lead the TC for a term of three years. AC members participate in the Advocacy and Media Task Forces on the essential white pigment titanium dioxide, and in the Biocide Users TF to monitor and advocate for the approval of in-can preservatives needed for water-based products (see also separate articles in this report). The committee is also gathering data to establish AC consumer exposure parameters for use in substance risk assessment – potentially necessary to defend the safe use of certain substances under threat. CEPE also works closely with the European associations of the toy and writing instrument industries to monitor and react to developments in the Toy Safety Directive 2009/48/EC:

in the past year a 7-fold reduction in migration limits for lead has been implemented (which will imply more testing to ensure compliance), and a similar reduction in limits for aluminium is now in the pipeline. The AC TC analyses the impact of such proposals and provides comments and data to the responsible unit at the European Commission, although regrettably we were refused official observer status. An AC TC member also participates in the chemicals working group of the European standardisation committee on toy safety, CEN TC 52, which develops the EN 71 family of harmonised standards supporting the TSD provisions.

CEPE, and the AC sector specifically, is also supporting the writing instruments industry in advocacy against the CLP labelling of pens and markers, and participating in a DUCC project to simplify labels (see Hazard Communication article). At the time of writing the AC TC is publishing a 'best practice' guideline on the safe and responsible use and disposal of colours, and working on technical guidance on the correct way to apply certain colours: it is believed that such advice will carry more credibility if it comes from the collective industry body rather than individual members.

Promoting the value of art and creativity

In the development of children (4-18y) the priority of Art Education is under pressure. In this digital age schools' curricula are giving

more attention to skills development for IT. Also the STEM (Science, Technology, Engineering and Mathematics) subjects are getting more attention in Europe nowadays in view of a future shortage which would hurt EU's competitiveness. Benefits of Art Education (AE) are less obvious and thereby often less known. Hence AE loses out against the above subjects in the school curricula. Advocacy on the value of art and creative development in education has proved successful in the USA, and it is desired to do something similar in Europe although there is no EU-wide coordination of educators or policy. An EuACA core group has been formed to work with research institutes on the influence of art education on child development. 



CAN COATINGS

Direct food contact applications are sensitive areas. The CEPE Can coatings Sector Group has been busy addressing a number of issues to satisfy customers and Authorities

NATIONAL LEGISLATIONS

Legislation development has been ongoing in Belgium and in The Netherlands for a number of years. They should be similar and will cover can coatings.

In Belgium a Royal Decree was published end of 2016. It does not contain lists of monomers and additives but determines the acceptable conditions for using them.

The Dutch authorities are reviewing the lists of substances that they will accept. A list was expected in the autumn of 2016 but isn't yet available as we write. We are expecting the release of a list of substances fully approved and temporary lists. We are also expecting to see more specific substances description than in the past (such as generic C4-C20...). The best guess is that we may see more by the end of this year. The difficulty that we experience is linked to the

uncertainty that all substances in use will be positively listed. Should the Dutch legislation be complete enough then it would be very useful to our members since mutual recognition would apply for the other Member States.

NEW GUIDELINES

A new Guideline for Migration Testing was issued in July 2017. It specifies conditions that

are more relevant to can coatings than to plastics. It is published on the CEPE website and has been distributed to relevant Institutes and Authorities.

A Guideline on NIAS (Non Intentionally Added Substances) is still under preparation in a dedicated group.

ACTIVITIES AT EU LEVEL

The situation of BPA is still difficult (see the separate article on substances and REACH). The Can coating industry remains in a situation of limbo and the current development with identification as endocrine disruptor will not facilitate the EU Commission in their efforts to ask France to lift their ban for epoxy coatings (a vote on a draft measure was expected in September 2016 – nothing so far).

A Cross Sector Group (SCG) for Regulatory Approaches for Food Contact Materials



(FCM) has been created. It is trying to harmonize regulatory approaches for FCM, it does not intend to harmonize legislations for food contact materials. It is made of about 40 people and contains 4 sub-groups.

CEPE is represented in all of them by Can Coating members. This CSG has done a tremendous job in a short period and is in contact with the EU Commission, which appreciates the input. ↻

MARINE COATINGS

The fate of anti-fouling paint is getting a better perspective

COPPER COMPOUNDS HAVE BEEN APPROVED

Most anti-fouling paints use copper compounds as biocidal agent to foul organisms, typically in combination with an organic biocide. Anti-fouling paints are biocidal products and have to be authorized at national level under the new EU Biocide legislation (BPR) when all active substances they contain have been approved. This is now the case after many years of review and hard work.

Our member companies placing on the market anti-fouling paints are therefore very busy identifying which of their paints they are able to support and are busy preparing application files for them. This represents significant burden both in terms of efforts and costs. A significant wave of dossier submissions is expected by early 2018.



WHY CAN'T OUR MEMBERS MAINTAIN ALL THEIR EXISTING ANTI-FOULING PAINTS?

For two reasons. First the rules have changed. The new EU rules are more stringent than previous national systems, where they existed. It has become very difficult to pass the risk assessment criteria, both for the environment and for human health. It does not mean that paints are more dangerous than previously but it is the precautionary measures inherently built under the new EU system that makes it over-conservative. Second the costs to support one paint have 'sky rocketed' since all the burden has to be supported by industry, including the work of the employees of national ministries. The consequence of setting a high barrier is that only a few can jump over it.

HAVE ADVOCACY EFFORTS BEEN USEFUL?

It seems that, overall, the importance of keeping anti-fouling paint on the EU market has been understood for commercial ships as risk assessments inside harbour – a human disturbed environment by definition – should not be necessary, only just outside of it where the dilution factor to the sea or to the ocean is naturally greater.

For pleasure crafts some Member States will make it more difficult and we expect to see issues with Mutual Recognition. Together with the international Yacht industry (ICOMIA), CEPE advocates to authorities to:

- » Take a balanced view of the issue, considering the broader environmental concerns (e.g. pollution of waters with non-indigenous species)
- » Know the impact on the economy and the jobs
- » Define protection goals that are sensible and realistic ↻

DECORATIVE COATINGS



Consumers buy paint, apply paint and inhabit spaces that are painted. All these aspects need to be considered when one wants to place a decorative paint on the market.

WHEN YOU BUY PAINT; LABELS.

Ecolabel

The EU Ecolabel is one of the legislative schemes that the paints have been most actively involved in. Starting from the criteria for indoor and outdoor decorative paints and varnishes released in May 2014, there were many steps and discussions that took place in order to improve and re-evaluate many elements from the User Manual. The update User Manual was released in March 2016 and the old criteria were valid until February 2016. Since then, the new criteria that include both indoor and outdoor decorative paints and varnishes were put in force including the corrections from derogations and discussions during the two year period from the previous release of the criteria. These new criteria are now valid until May 2018 for which the discussion on their future has already started.

What will be the future of the Ecolabel?

CEPE has already shared their concerns to the European Commission on the view of the industry around Ecolabel. The Fitness check done by the Commission will play a very important role in the long term decision making process for the future of the scheme. The Fitness Check report has been released on 30 June and the main elements reveal the following:

- » Three Product categories will be discontinued: flushing toilets and urinals, sanitary tapware, and imaging equipment
- » Paints are still one of the more successful product groups in number of subscribers.
- » Criteria that always lead to the exclusion of hazardous substances are reaching their limits and a risk approach should be further looked into for some cases. (e.g. when substitution results in decreased durability, as has been the case for paints)“
- » For the categories that have good uptake the European Commission aims to:
 - develop new strategic approach by cooperating closely with the related product groups
 - invest more time in communication and promotion of the EU Ecolabel
 - reduce administrative costs
 - improve the time for revision activities
 - focus and improve the consistency between the EU Ecolabel and national/regional labels
 - enhance better supply chain management

For the detailed Fitness report, please visit the website for EU Ecolabel.

CEPE's opinion on the Ecolabel

CEPE members position to the new requirements:

- » With squeezing the amounts and the number of substances that are critical for producing a paint with good performance it gets evermore difficult to have Ecolabel go together with a 'good quality' paint.
- » Understanding the requirements and the derogation lists becomes ever more complex.

CEPE members seriously question if the effort to get an Ecolabel will be worth it.

Product Environmental Footprint

This work may lead to a new label in the future, giving a ranking on the Sustainability character of the deco paint. The DECO sector is monitoring the developments under PEF with the dedicated team assigned to the project. The project and its status can be found in the section of Sustainability. The DECO sector will be involved in the discussions from next year on and for the coming two years, where the evaluation of the project will take place and the policy options will be discussed.

Will the classification of TiO₂ lead to a new pictogram?

We refer for the status on TiO₂ to the part on defence of substances in this annual report.

Our industry strives for the continued use of TiO₂ as ingredient in our end products, but not having to carry this particular hazard labelling (i.e. pictograms + statement) on cancer for the mixtures containing TiO₂. CEPE believes that there is no need to carry a pictogram when the risk on inhalation is no longer there.

After it became known that RAC concluded on a Cat. 2 classification CEPE issued a message that members could use for their customers and in which the safe use of paints was communicated.

WHEN YOU STAY IN A PAINTED ROOM, WHAT COMES OFF THE WALL?

Indoor Air Quality

Status of the issue

Given the absence of EU direction there have been several Member States that initiated their own decrees on this topic. A fundamental difference between these decrees exists in which products can be placed on the market. Some accept different classes on IAQ, others allow only products that comply with staying below the maximum levels of the health adverse substances.

As today there are decrees in force in DK, FI, DE, FR, BE and in preparation in Lithuania.

But there may be a chance of harmonization across EU as the Standing Committee on Construction-Advisory Group (SCC-AG) has a proposal for a draft delegated act for a harmonized classification of VOCs and Formaldehyde. CEPE has expressed its support to the SCC-AG for such harmonization even when paints are not Construction Products.

Co-operation

Cooperation with UNIEP, the professional painters

Since several years now the DECO group co-operates with UNIEP. This year the DECO Chairman spoke on the General Assembly of UNIEP in Vienna. He advised UNIEP that future cooperation with CEPE should be focussing on specific countries where a clear need exists for either training of employed painters or on reaching the next generation of painters. ◀

PROTECTIVE COATINGS

Standards for corrosion protection a key activity

The Sector of Protective Coatings is highly active in the main standards for their industry. Currently the attention is on review and renewal of all parts of ISO 12944 (Paints and varnishes — Corrosion protection of steel structures by protective paint systems) and ISO 20340 (Protective paint systems and laboratory performance test methods for offshore and related structures)

- » Part 1 - General introduction: durability ranges have been adjusted, new durability „very high“ for > 25 years
- » Part 2 - Classification of environments: corrosivity category CX was integrated and immersion category IM 4 for offshore

environments with cathodic corrosion protection was defined

- » Part 3 - Design considerations: updated
- » Part 4 - Types of surface and surface preparation: updated
- » Part 5 - Protective paint systems: normative part for minimum requirements on number of coats and minimum nominal dry film thickness of systems was included, tables were simplified
- » Part 6 - Laboratory performance test methods: cyclic tests were included for high corrosivity categories with long durabilities, requirements before and after artificial ageing were adjusted

- » Part 7 - Execution and supervision of paint work: updated
- » Part 8 - Development of specifications for new work and maintenance: updated
- » ISO 20340 will be integrated into ISO 12944 as Part 9 - Protective paint systems and laboratory performance test methods for offshore and related structures: requirements before and after artificial ageing was adjusted, requirements after cyclic testing are not differentiated according to primer technology anymore, but to application field

All parts will be published until mid of 2018. ◀



INTUMESCENT COATINGS



What can be done to establish a level playing field for reactive / intumescent coatings across Europe?

The biggest challenge currently for the European Intumescent Coatings sector continues to be the distortion of the market, due to the lack of sufficient controls regarding the products used, in terms of their certification, performance level, testing, and overall quality. The message from the CEPE community, represented at the meetings of the Intumescent Coatings Technical Committee (ICTC), remains the same as it has been for the past decade – the market is unbalanced and unhealthy, and the authorities need to listen to industry and address this promptly and as a high priority.

The need for action

One would think that fire safety, and protective methods to ensure minimal loss of life in the event of a building catching fire, would be a top priority for governments, committees and organisations associated with the construction industry. Yet, over the last few years, this issue has been brought to the attention of numerous people in responsible positions at national and European level on many occasions, without any obvious progress being made. This is an almost perverse situation – usually industrial sectors would try and fight or minimise the impact of any new legislation on their business. On this occasion the sector is actively welcoming and encouraging authorities to take a greater interest in the intumescent coatings sector, to bring in mandatory CE marking, and a long-awaited step change in how the market functions, and ultimately to ensure that the best fire safety measures are employed in the European construction industry.

Mandatory CE Marking as a way to rebalance the market

The main approach to meeting this challenge is the industry's call for the EU Commission to establish a mandate for the European Standards body (CEN), for a Standardisation Request / harmonised European Norm (hEN) for various fire protection elements, including reactive (intumescent) coatings on various substrates. Once such a harmonised Standard is established then intumescent coatings would be able to introduce CE Marking as a compulsory element for all manufacturers to comply with resulting, one would hope, in a level playing field. Several drafts of this mandate have been discussed since the middle of 2014, and all have been welcomed by the parties involved, yet a final mandate is still eagerly awaited.

The ICTC members continue to exert pressure wherever possible to encourage progress – the latest comments from the UK government's representation to the Advisory Group on Construction Products (AGCP) in April 2017 suggested that the earliest date that this mandate may potentially be realised would be at the end of 2017. A Standardisation Request Ad Hoc Group (SHRAG) has been set up to advise CEN on the issue. The suggestion was to split the Reactive Coating product from other product groups for the Standardisation Request. This could speed up the process of the Standardisation request as a lot of preparatory work has already been done by different working groups.

Third Party Certification – why is it failing the industry?

So what else can be done in the meantime? One way of approaching this is to ensure a comprehensive and proficient method to the testing and certification of products. There is a clear benefit for this to be done

by a third party, to ensure that a full set of testing is done to the correct Standards, and that the relevant results are reported and assessed to ensure adequate product performance meeting the fire requirements as appropriate. **The CEPE ICTC members have all signed up to a voluntary code of practice to use third parties to certify their products, despite the additional costs involved with this.** There are several Standards currently in use, including BS EN 16623:2015, which was intended to be a step forward in ensuring increased use of best practices related to the testing, specifying, manufacture and inspection of intumescent coatings.

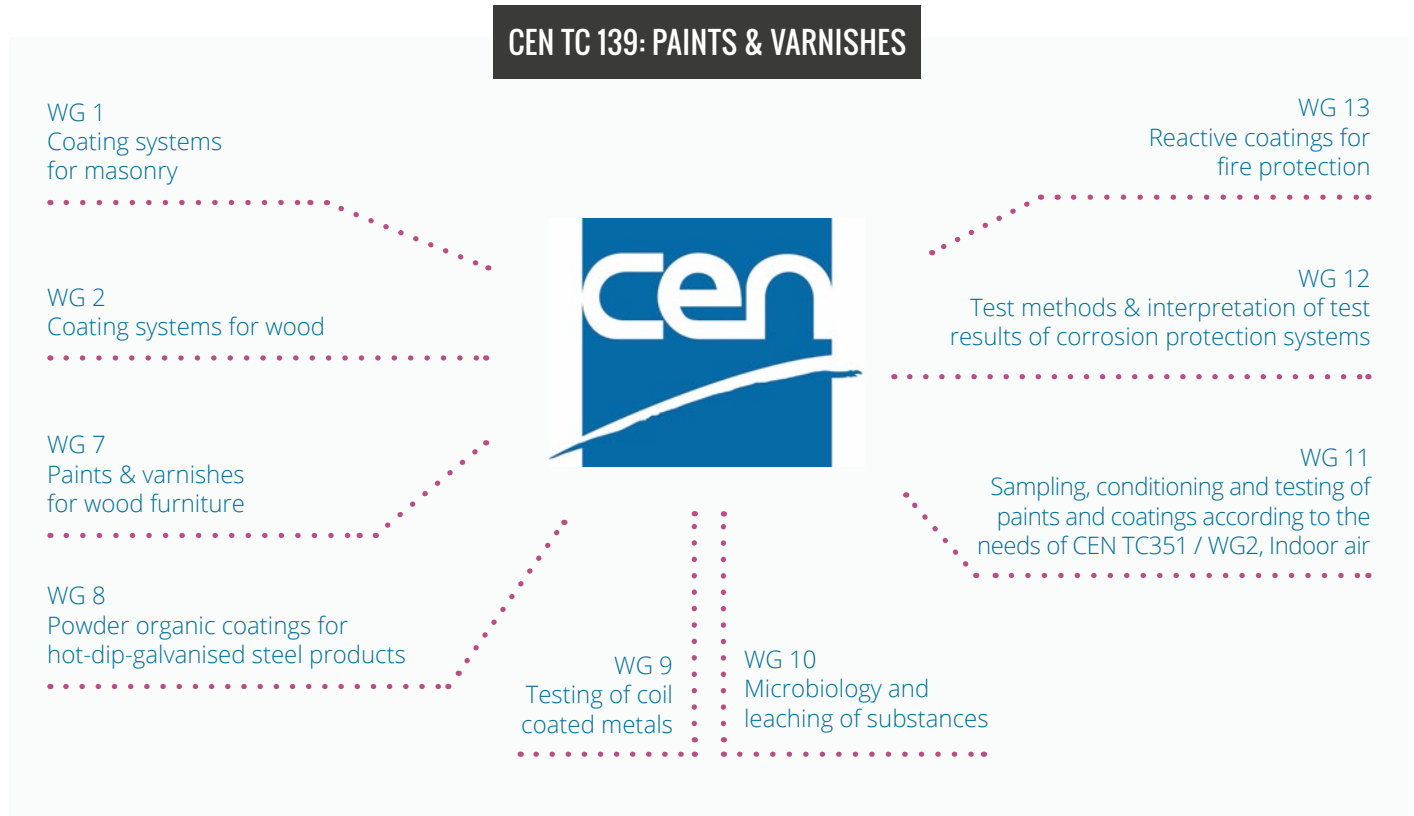
Unfortunately this approach does not mean that all products meet a common set of minimum performance standards, as the quality and competency of certification bodies carrying out such testing varies significantly across the different EU Member States. Our members encounter (on a monthly basis) substandard certificates for commercial intumescent coatings, with insufficient information, mixed methods and details, and testing referring to incorrect Standards. These non-compliant assessments are reviewed by the Certification Bodies across Europe, but there appears to be a lack of procedure and/or resource to control and prevent these from being approved, and hence for the product to enter the market. A mechanism by which these certificates may be withdrawn or cancelled also appears to be lacking. Manufacturers can easily identify where a certificate lacks the correct minimum amount of data, and these issues are brought to the attention of the appropriate authorities, yet little to no action is taken. Currently the European Organisation for Technical Assessment for construction products (EOTA) has a major role to play in the activities of these certification bodies, yet appears to be unable to police a system that is open to misinterpretation and misuse. Separate to this, the activity underway to replace the existing European Technical Approval Guidelines (ETAGs) for intumescent coating certification (ETAG 018 part 2) with a European Assessment Document (EAD), which was an opportunity to tighten up on certification procedures did not achieve this goal. Furthermore, this revised EAD has met with considerable delay even though a draft text was agreed without technical changes, it has yet to be published by the EU Commission.

In conclusion.....

The intumescent coatings sector continues to spend a great deal of resource and effort to try and address the issues related to the un-level playing field currently in place. The continued delays to the approach that should lead to mandatory CE-marking, and the failings of the current procedure to certify intumescent coatings, are major challenges that should be of prime concern to government officers, and organisations which have responsibility for products used in the construction industry, especially as this relates to fire protection measures and thus, ultimately, to saving the lives of members of the general public. 📌

ACTIVE STANDARDIZATION BODIES FOR PAINTS

Diagram of the sector and working groups for the respective technical committees CEN TC 139 and ISO TC 35.



CEPE BOARD MEMBERS

The European Council of the Paint, Printing Ink and Artists' Colours Industry strengthens the position of the paint, printing ink and artists' colours industries in Europe. It is run by a Board of 15 company representatives.



JEAN-MARIE GREINDL, PPG

J.-M. Greindl has graduated Cum Laude as Commercial Engineer from the Université Libre de Bruxelles (ULB) in 1987. He joined Petrofina in Belgium where he held several marketing positions. Since 1999, he entered the paint business; first as General Manager at Polifarb in Poland; then as President of the French affiliate of the SigmaKalon Group where after several years he became active as the Director of the Southern European region. He is currently Senior Vice-President Architectural Coatings and President, PPG EMEA. He acted in 2009-2010 as Vice-President of the French paint association.



ERKKI JÄRVINEN, TIKKURILA

The manager has worked as President and CEO of Tikkurila since the year 2009. In the past, his functions included President and CEO of Rautakirja Oy, a Finnish-based retail company with a turnover of EUR 850 million, which is active in Finland, the Baltics, the Netherlands, Germany, Russia, Romania and the Czech Republic. Erkki Järvinen is Chairman of the Finnish national organization. During the last years, Erkki has repeatedly given presentations at CEPE conferences.



TILL IVERSEN, IMPARAT FARBWERK

1987 - 1992 Master of Business Administration (Dipl. Kaufmann) at the University of Hamburg. During his years of study he spent one semester in Berkley California. Afterwards he obtained some working experience at the company Schwarzkopf in Los Angeles. In 1993 he started at Imparat Farbwerk and became one of the two managing directors one year after. Since 2002 he runs the company as the sole CEO. He is serving as Vice-Chairman in the northern division of the German Paint Association (Deutscher Lackverband) for the last 6 years. Imparat Farbwerk was established in 1905 and is still a family owned paint company. The company has a turnover of 30 Million € with 180 employees. Decorative paints, polymer emulsions and industrial paints are produced in the two plants. In decorative paints the focus is mainly on the German professional painters. The polymer emulsions are sold, Europe wide, mainly to paint companies. The industrial paints have their focus on general industrial paints and marine paints.



CARLO JUNGHANNS, J. COLORS SPA & ARSONSISI SPA

who was born in the year 1951, holds a degree in Political Science and Marketing. Representing the third generation in a family of entrepreneurs, Carlo Junghanns joined the family company in the early 1970's. During more than 40 years, he has concentrated on promoting the firm's expansion through a series of acquisitions and developments aimed at strengthening positions in both the decorative paints and colorants business and the industrial coatings sector. He has been an active participant in the Italian coatings trade-association AVISA and since 2010 has been involved in the industry association Assovernici of which he was a founding member.



JACQUES MENICUCCI, ALLIOS

Born in New York (USA) in 1953 from French parents, he settled in France at Marseilles. Joined Allios Paint Company in 1978 after graduating from Marseilles Business School (ESCAE), completed with a financial diploma DECS. Today CEO of Allios Paint Company, he is mainly in charge of Business Development which concerns National Domestic activity and moreover International Development. Allios Paint Company is mainly involved in the Deco paint market through Professional or Do-It-Yourself distribution networks. Allios is a family owned company, more than 150 years old. Sales are around EUR 60 million and Allios employs 330 persons. Jacques Menicucci has been involved for many years with France's national paint Association FIPEC and served a first period on the CEPE Board from 2004-2010.



MICHAEL JÖRGENSEN, BECK & JÖRGENSEN

Beck & Jörgensen (est. 1892) is a family owned company that employs approximately 80 people. It is mainly active in the decorative and wood working sectors. Michael Jörgensen is CEO of Beck & Jörgensen since 1984. He is an active member of the Danish Coatings and Adhesives Association where he acts as chairman since 2010.



ANDRÉ VIEIRA DE CASTRO, ARGACOL

Current function/responsibilities: Chairman/CEO since 2007 of a 4 mio € company with no more than 35 co-workers. 2 sites, water based in Leiria (120km south of Lisbon), solvent based in Famalicão (30km south of Oporto), main responsibilities in Strategy and New Business Developments, team motivation, leadership, recruitment, institutional representation, community lobbying,...



RUUD JOOSTEN, AKZONOBEL

Member of the Executive Committee responsible for decorative paints AkzoNobel.

Past functions:

Jan. 2011 - May 2013: Managing Director Pulp and Performance Chemicals AkzoNobel/President EKA Chemicals AB

Jan. 2008 - Jan. 2011: Managing Director Decorative Paints North East Europe AkzoNobel

Jan. 2006 - Jan. 2008: Managing Director Decorative Paints Europe North AkzoNobel

Jan. 2001 - Jan. 2006: General Manager Trade Decorative Paints AkzoNobel, the Netherlands, Belgium, Spain and Italy

May 1996 - Jan 2011: Marketing Director Decorative Paints AkzoNobel

May 1988 - May 1996: Various Sales and Marketing Jobs in Sigma Coatings (PPG)



GEOFF MACKRILL, TEAL & MACKRILL LTD

Teal & Mackrill was established in 1908. The business operates in the specialist coatings sector and the marine paints sector. The manufacturing site is in Hull. Geoff Mackrill is the Managing Director and is currently Board member of the British Coatings Association

BOARD MEMBERS FOR RE-ELECTION



HARALD BORGHOLTE, BASF COATINGS

April 1991: joined BASF
Vice President, Strategic Marketing & Product Development BASF. Member of the Global Senior Steering Committee BASF Coatings GmbH. 23 years in the Coatings Industry in various fields
Vice President Strategic Planning Coatings
Vice President Global Business Management Automotive Refinish
Director Technology Management Automotive Refinish



HERBERT FORKER, SIEGWERK DRUCKFARBEN

Since august 2002, CEO of Siegwerk Druckfarben AG & Co. KGaA. Prior to his assignment at Siegwerk, he was President and CEO of Tesa Tape Inc, Charlotte, NC, USA. He served also in several management positions with Beiersdorf. Since 2004: Member of the Eupia Council, former member of the German Paint and Ink Association (VdL), Former member of the CEPE Board (2006-2012)

NEW BOARD MEMBERS AT GENERAL ASSEMBLY 2017



HEINER KLOKKERS, HUBERGROUP

Company activities: The hubergroup is one of the leading printing ink manufacturers in the world. It is more than 250 years old and still family owned. Main products are printing inks for publication, printing inks for packaging, varnishes and other chemical products for the printing industry. The company is active on a global basis with more than 40 subsidiaries.

Current function: Heiner Klokkers is Member of the Board and responsible for the European Business. From January 1st 2018 he will become Chairman of the Board, being responsible for the Global Development and Strategy of the group.

Past functions: Heiner Klokkers started his career in the BASF in 1990. He worked in various positions in Germany, UK and the US before he joined the hubergroup in 2004. There he started as Sales Director for the Central Eastern Region in Europe. From his Sales role he moved into a Key Account function before he took over the responsibility for the European Business Unit in 2012.

Heiner Klokkers has been member of the German Paint and Ink Association (VDL) and he is part of the EuPiA Council since 2014.



MATTHIAS SCHÖNBERG, AXALTA COATINGS SYSTEMS GMBH

Company activities: Axalta develops, manufactures and sells a wide selection of performance and transportation coatings. Axalta performance and transportation coatings provide liquid and powder coating systems to a wide range of markets that include light and commercial vehicles, collision body shops in the refinish aftermarket, and many industrial applications.

Current function & responsibilities: President EMEA and Vice President Axalta Group: Responsible for defining and executing the Axalta Group Strategy in EMEA for all businesses: Industrial Liquid, Powder, OEM supplier and Refinish.

Past functions: 17 years at Continental AG – automotive supply, tenures in Germany, Portugal, Mexico and USA. Last function: Executive VP, Head of Business Unit ContiTech Fluid Systems.



MICHEL KRANZ, OWNER & CEO OF BICCS

Owner and CEO of company
Was during 3 years Chairman of the VVVF and member of the VVVF Board
Currently Vice-Chairman of the VVVF & Member of the VNCI Board

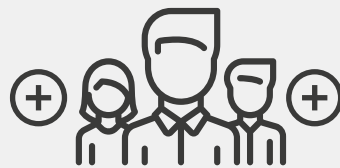


DANIEL LLINAS, INDUSTRIAS TITAN

Company main activities :Manufacturing and distribution of liquid coatings for decoration and industry as well as powder coatings.

Past functions: CEO URSA INSULATION, Managing Director Zanini Group, Managing Director Southern Europe Riverwood International, Sales Manager Tetra Pak.

Currently CEO of Industrias Titan, he has been also Board member of EURIMA, European Insulation Manufacturers Association (Belgium) for 6 years



NEW BOARD MEMBERS

EU SECTOR GROUP CHAIRMEN



CAN COATINGS

Neil Finley
Grace Darex
Germany



COIL COATINGS

Pasi Niemisto
The Valspar Corporation
Finland



DECORATIVE COATINGS

Thierry Destruhaut
Associate Director
Technical Marketing & Innovation
PPG Architectural Coatings
The Netherlands



MARINE COATINGS

Bjorn Tveitan
Sales Director Marine
Scandinavia Jotun Coatings
Norway



POWDER COATINGS

Bjorn Karlsen
Jotun Powder Coatings (N) AS
Norway



ARTISTS COLOURS

Ronald Benning
CEO Royal Talens
The Netherlands
www.artists-colours.org



PROTECTIVE COATINGS

Gerard de Vries
AkzoNobel
The Netherlands



VEHICLE REFINISH

Peter Maassen van den Brink
Valspar
The Netherlands



PRINTING INKS

Herbert Forker
Siegwerk
Germany
www.eupia.org





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