Résumé

European Resin Manufacturers Association Newsletter- 4th Quarter 2017

EUROPEAN RESIN MANUFACTURERS ASSOCIATION

4th Quarter 2017 résumé Content:

Season's Greetings Message from ERMA Chairman David Graham "Happy New Year 2018"

It is my great pleasure as association chairman and on behalf of executive committee to wish you and your family a joyous holidays season and a new year filled with peace and happiness.

During this year, we have seen the benefits of ERMA new organisation structure, our association activities and members support.

We have been able to increase our members and hope we can create the best collaborations as a new team during coming years.

We published quarterly résumés and organising actively our annual conference with a series of master classes reports and talks to address a variety of critical issues for our industry and members.

Our ERMA 2020 vision and road map should help to create a strong partnership with other associations and authorities organisation.

Please let me to welcome the new members and wish you all the best for 2018.

ERMA 2017 Annual Conference

The ERMA 2017 Annual conference was held on October 13th 2017 in the beautiful city of Nice. The Annual Conference provided a successful platform for members and partners to discuss, raise questions and suggest Partnership for supporting European Resins Manufacturers.

Selected points that came out of the presentations & discussions are presented in this Résumé.

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REACH : Speaker from CEFIC : Dr. Erwin Annys (REACH/Chemical policy Director)

REACH is clearly more than the registration of substances. The interaction with evaluation and authorisation is complex, but clear.

- *A producer/importer registers a substance and pays a registration fee and letter of access (no data, no market);*
- *Information is disseminated on the ECHA website, except confidential information;*
- *Polymers are only exempted from registration and evaluation; Review possible at any time when a practicable and cost-efficient way of selecting polymers for registration is found;*
- *For all uses (covering the entire supply chain) up to end-of-life;*
- *These uses are covered by the chemical safety assessment (if substance > 10 ton per year);*
- *The chemical safety assessment shall consider the use of the substance on its own (including any major impurities and additives), in a mixture and in an article, as defined by the identified uses. The assessment shall consider all stages of the life-cycle of the substance resulting from the manufacture and identified uses.*
- *If substance is dangerous exposure scenarios (ES) must be worked out (including operational conditions (OC) and risk management measures (RMM));*
- *These ES will be added into the extended safety data sheet;*
- *Substances of very high concern can lead to an authorisation process with the ultimate aim of substitution;*
- *Substances with unacceptable risk to human health and environment can go into restriction of their uses;*
- *~1250 substances are considered as high priority substances by ECHA;*
- *REACH will not be emptied, but other legislations will be brought on the same level of REACH*
- *The best strategy to keep polymers outside REACH for long time is to think about the Chemical Safety Report (CSR) for monomers; What is possible for an additive in a polymer in the CSR, must be possible for a monomer as well;*

Industry has registered around 6, 000 substances in seven years (40 times more substances than were evaluated under the previous legislation) and more than 10, 000 companies have registered substances. 174 substances of very high concern have been identified and there are 20 new restrictions on use of dangerous substances to reduce risks.

- *The REACH Regulation includes the obligation for a review every 5 years to monitor progress in the achievement of its objectives. The second REACH Review, due in 2017, is being carried out in parallel with the fitness check on the most relevant chemicals legislation excluding REACH.*
- *REACH REFIT Evaluation inputs:*
  – Effectiveness
  – Efficiency (costs/benefits)
  – Relevance (matching the needs and problems)
  – Coherence (internally and with other EU interventions)
  – EU added value

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Product Environmental Footprint (PEF) - DeCo paints PEF pilot Project

Speaker from CEPE: Dr. David Brunt (AkzoNobel Global Marketing & Sustainability Director)

CEPE leading the Decorative Paints PEF pilot project with coatings industries and other European organisations concerned by this project.

Why did CEPE get involved in PEF and sustainability:

CEPE sustainability target and External Demand have been the strategy drivers for the organisation.

- *CEPE members will be encouraged in future to also identify and analyse the broader environmental effects of their products (carbon footprint, water usage etc.) over the product's Life Cycle (from cradle to grave).*
- *Provide the solution and support members to satisfy external demands such as:*
  - *Consumers (Ecolabels, etc.);*
  - *Retailers (B&Q and Brico working on their green image);*
  - *Legislators (e.g. France & Germany request EPDs in specific situations);*
  - *Green building schemes.*

Pilot project:

Pilot started in Nov. 2013 and since then, several steps were successfully finished. Project representative product have been defined (Decorative paints "interior & exterior").

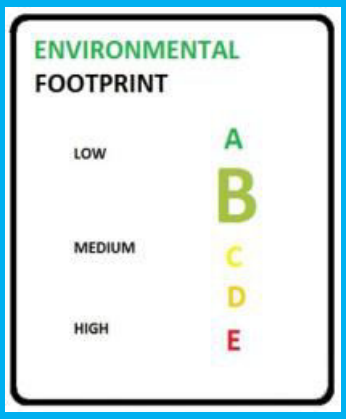
As part of the Environmental Footprint pilot phase, the pilot on decorative paints aims to test:

- *A process for the development of Product Environmental Footprint Category Rules (PEFCR). These are the product group rules for calculating Product Environmental Footprints;*
- *The development of a "product benchmark" for the product group of decorative paints;*
- *The application of PEFCRs to concrete cases;*
- *Different compliance and verification systems, in order to set up such systems in an proportionate, effective and efficient way;*
- *How to communicate life cycle environmental performance information to various target audiences (e.g. PEF information through business-to-business and business-to consumer communication tools; information in sustainability reporting) in collaboration with stakeholders.*

Model for PEF decorative paints screening:

The "representative product" model should include the following elements:

- ✓ *Bill of materials (BOM);*
- ✓ *A flow diagram (system boundaries) covering the entire life cycle;*
- ✓ *Assumptions related to transportation systems;*
- ✓ *Assumptions related to use scenario (if relevant);*
- ✓ *Assumptions related to End of Life (if relevant).*



Communication:

Tested three different ways of Communicating the PEFCR results:

- ✓ *PEF Label;*
- ✓ *Website with additional information;*
- ✓ *PEF Factsheet*

Challenges & next steps:

- ✓ *PEF is not perfect yet but still good and efforts are ongoing.*
- ✓ *Durability schemes: durability schema is based on the building lifetime (50 years). Life-time of product is the core determinant of sustainability of paint (how often do we need to repaint?), there is not the test method to give lifetime in years, but the further analyses based on real product life cycle time should help to identify the gaps and validate the rules written in the PEFCR.*
- ✓ *Raw material s are key to PEF performance and contribution of RM's to durability will be a competitive advantage.*
- ✓ *There is a need for time and effort from all stakeholders and paint companies to work towards a common target – single market for green products*

Bio-based resources: speaker from ACDV (Mr. Eric Firtion "Innovation Director at UIC")

Several applications compete for biomass (food, biofuels, energy, paper, textile, and let's not forget, the chemical industry). For a credible 'green' chemical industry, it is essential that the sustainability of biomass is guaranteed. Biomass in the chemical industry replaces a part of fossil raw materials, as is the case in the transport and energy sector. The question is:

- *How much biomass is required in the European chemical industry?*
- *How efficient is the utilisation of biomass in the chemical industry and for which application?*

1- Market potential for Biobased Chemicals:

- *The global market for biobased products is estimated to be ~76 billions € in Europe. 3% of worldwide chemistry sales are biobased.*
- *About 10% of biobased raw materials are used by the chemical industry in Europe and 285000 jobs in Europe linked to plant based chemistry.*

2- Three types of innovative functionalities:

- *Technological (new properties of products)*
- *Environmental (life cycle analysis used for impacts assessment)*
- *Societal (new jobs and new professions creation)*

3- Resources access:

Biobased chemistry is using 30 million tons of cultures, equivalent to 6 million ha, meaning less than 0,5 % of farmland. Resources access is one of the key challenge of 21st century due to (2050 projections):

- *Population growth by 50%*
- *Demand on food increase by 70%*
- *Demand on energy increase by 100%*

4- Polymers and biobased polymers

- *Polymers are the vertebral column of the organic chemistry (60 % of the applications);*
- *They establish the basis of materials essential to the development of the sustainable chemistry;*
- *There is a need for new polymers with specific functionalities for the industries downstream, in particular in the field of plastics, adhesives, paints or still cosmetics;*
- *Biobased polymers also allow to diversify the raw materials used by companies and contribute to the reduction of the environmental impacts of products in BtoB as in BtoC.*
- *Main families of biobased polymers:*
  - ✓ *The "old fashion": Cellulose and polyamides (coming from ricin);*
  - ✓ *Substitution polymers: PE (polyethylen), PET (polyethylen terephtalate);*
  - ✓ *New structures:*
    - *biobased and biodegradable plastics based on starch chemistry*
    - *PLA (poly LacticAcid), PHA (poly Hydroxy Alcanoate)*
    - *polymers based on succinic acid, isosorbide, propanediol or furane dicarboxylic acid*
- *Functional biobased polymers:*

  Functionnal polymers are mainly intended for adhesive, paints and varnish, ink and tightness markets. Examples:
  - ✓ *Polyamide on dimer fat acid*
  - ✓ *Colophan resins*
  - ✓ *Terpenic resins*
  - ✓ *Buildings blocks for acrylic esters, polyesters, polyurethan, epoxy resins, ...*

5- Trends and growing factors:

- ✓ *States policy(bio preferred public policy) and bio-economy strategy;*
- ✓ *Standardization and regulations;*
- ✓ *Carbon and environmental impact (price of CO2 ton from 22,5 € in 2016 to 86 € in 2022);*
- ✓ *New functionalities performances of biopolymers;*
- ✓ *Consumer acceptance*

Note: Max 30% of chemicals in the market could be from bio-sources (Business Risk management due to resources availability).

Microplastics, Microbeads & Microfibers:

Speaker from PlasticsEurope: Mr. Guy Castelan (Technical and regulatory affairs, Life Cycle Thinking expert)

Marine litter is a global concern, affecting all the oceans of the world. Every year, millions and millions of tones of litter end up in the ocean worldwide, posing environmental, economic, health and aesthetic problems.
Poor practices of solid waste management, waste water (including storm water) collection and treatment, lack of infrastructure and awareness of the public at large about the consequences of their actions aggravate substantially the situation.

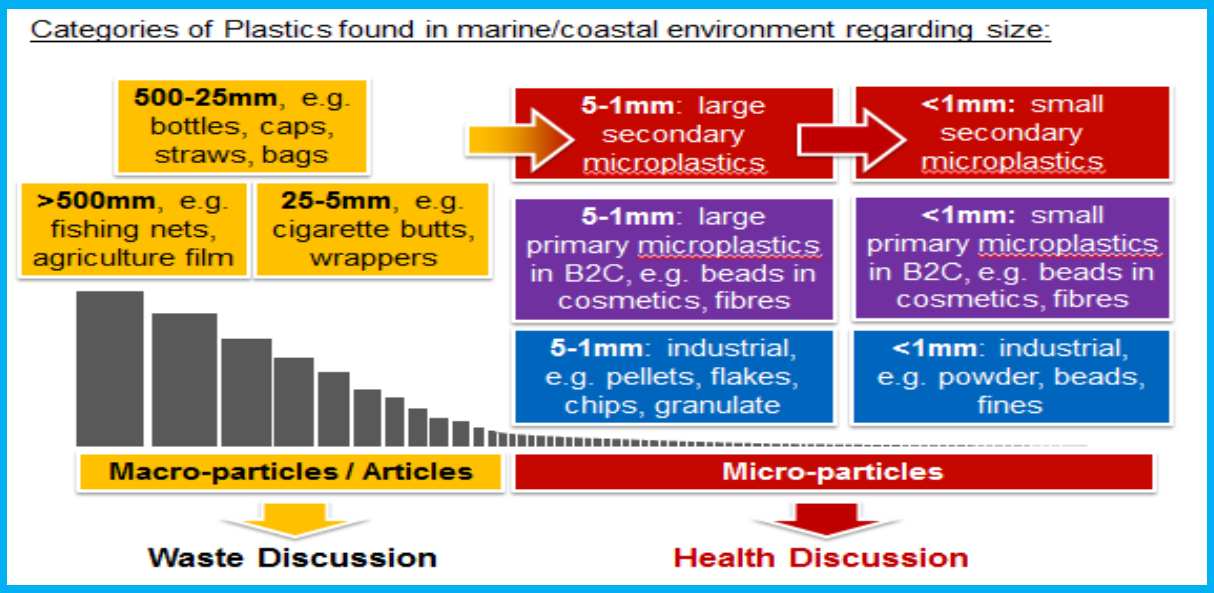
1- Marine litter sources:

- ✓ *Land-based (garbage and other solid waste). Around 80%*
- ✓ *Marine-based (shipping and fisheries activities and discarded fishing gear). 20%*

2- Circular Economy:

Marine litter is one of the clearest symbols of a resource inefficient economy. Valuable materials are polluting our beaches and damaging our environment instead of being pumped back into our economy. Therefore, a circular economy approach which puts the emphasis on preventing waste and on recycling and reuse of materials and products in the first place, is the best solution to the marine litter problem.

3- Marine litters Categorisation (Plastics example):



4- What is doing by authorities:

- *Studies initiated by European Commission:*
  - *Microbeads intentionally added to products (consultant AMEC – Foster Wheeler);*
  - *Microplastics from wear and tear (e.g. from textiles and tires). Investigating options for reducing releases in the aquatic environment of microplastics emitted (but not intentionally added in) products (Consultant Eunomia);*
  - *Plastics: reuse, recycling and marine litter to identify the best policy options to increase plastics re-use and recycle and the main priorities to be pursued within those objectives. It will also evaluate the influence of an increased reuse and recycling of plastics on marine litter (ICF together with Eunomia).*
- *The Circular Economy Package sets a target for reducing by 30% beach litter and list fishing gear until 2020.*
- *Implementing the Marine Directive for litter*

5- What is doing by industries(Plastics example: Close leakage points through waste management & product design):

- *Zero Plastics to Landfill objective;*
- *Support Research on micro-plastics in the oceans*

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Key 2017 European Chemicals Regulations updates & news

1- REACH: *Source: ECHA*

a) *The last REACH registration deadline for existing substances below 100 tonnes (31 May 2018)*
The last registration will affect thousands of companies that are first-time registrants, and many of them are the small and medium-sized enterprises. It is expected that the registration deadline of 31 May 2018 will be quite different from the two previous ones, in terms of both the number of registrations (up to 70 000) and the type of registrants.

b) *Restriction proposal on diisocyanates:*
The Committee for Risk Assessment (RAC) and the Committee for Socio-economic Analysis (SEAC) agreed on proposed restrictions on diisocyanates at the workplace, following a proposal by Germany.
The main goal is to prevent new cases of occupational asthma from exposure to diisocyanates among industrial workers and professionals.

c) *Restriction proposal on lead stabilisers in PVC articles.*
Following a risk management option analysis (RMOA), conducted by ECHA and published on its site on December 11, concludes that there is a need for a restriction to be introduced under REACH.

2- New Biocidal Products

The Biocidal Products Committee (BPC) has adopted opinions supporting the approval of four active substances for use in disinfectant, preservative and insecticide biocidal products. Another three opinions are expected to be adopted by written procedure. The committee's conclusion is that these substances in the relevant product-types may be approved.

Note*: The approval of an active substance is granted for a defined number of years, not exceeding 10 years (Active substances which are candidates for substitution will not be approved for more than seven years, even in the case of renewal. If the active substance meets one or more exclusion criteria, it will only be approved for five years).*

The active substances are:

- *MBIT for product-type 6 (Preservatives for products during storage)*
- *Imiprothrin for product-type 18*
- *Reaction products of para-formaldehyde and 2-hydroxy-propylamine (ratio 3:2) for product-types 2, 6, 11, 12 and 13*
- *Reaction products of para-formaldehyde and 2-hydroxy-propylamine (ratio 1:1) for product-types 2, 6, 11 and 13*

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2018 targets (regulation & events)

Brexit:

In a little over a year, the UK will be withdrawing from the European Union. Yet the future of the country and its chemicals industry is even more uncertain now than it was when a majority of UK voters decided, in June 2016 to back Brexit.

The UK government's plan is to transfer by the end of March, 2019, all the REACh registrations of companies in the UK to a register administered by a UK equivalent of ECHA. In the same legislation a UK central body, probably an existing government department, would take over the roles of the European Commission in the REACh legislation such as the endorsement of ECHA recommendations.

UK chemical companies do not wish to undergo the financial and administrative burden of making second, identical registrations.

Source: http://www.chemanager-online.com

ERMA Position: ERMA support the UK chemical companies "do not wish to undergo the financial and administrative burden of making second, identical registrations".

The European chemical industry has signed (14 November 2017) a joint statement setting out the importance of a future EU/UK trading relationship. The statement, agreed by Cefic (the European Chemical Industry Council) and CIA (the Chemical Industries Association, the organization representing and advising chemical and pharmaceutical companies located across the UK) covers supply chains, tariffs, customs procedures, free movement of people, investment, regulatory consistency and transition & legal certainty.

Source: http://www.cefic.org/newsroom

ERMA Position: ERMA support this CEFIC & CIA statement for future EU/UK trading relationship.

REACH: *If you have pre-registered substances that you manufacture or import from outside the EU above one tonne but not more than 100 tonnes per year and have not already registered them, the REACH registration deadline of 31 May 2018 concerns you.*

EVENTS:

- ***Eurocoat 2018*** *is the major gathering of the European coatings and paint industry event in the 1st quarter 2018.*

  Link for registration & more information: http://www.eurocoat-expo.com/