REACH
FOR POLYMERS
understanding legislation

A Toolkit Specially Designed to help
Smaller Plastics and Rubber Businesses
in Europe to comply with REACH

REACH for Polymers

Introduction

REACH, the European Union regulation for the Registration, Evaluation and Authorisation of Chemicals came into force in 2007. It had one main purpose: to protect human health and the environment from potential dangers from chemicals. As a result it was hoped that this regulation would help give consumers trust in products.

Although this is a simple premise at heart, the huge range of chemicals in use across the EU has made this a very involved piece of legislation. The simplest of chemicals through to the most complex are all covered, meaning potentially every manufacturer and trader in the EU is affected.

Polymers are a deceptively broad category of chemicals made up of a myriad of ingredients, with the potential for huge variations within each type. As a result, the REACH legislation initially exempts polymers from registration and evaluation. However, there is, instead, a complex procedure which forces manufacturers to pre-register the ingredients used to make the polymer.

REACH for Polymers aims to increase and consolidate the knowledge base of the European polymer industry, in particular SMEs, by applying new techniques, technologies, instruments and methods that offer environmental and economic advantages when complying with REACH regulations. The main objective of the project is the creation of a REACH toolkit for the European polymer industry. The toolkit is an interactive, innovative software application capable of guiding users through the entire REACH process, from understanding their individual requirements, through to knowing which tests to perform, registration and best practice. The eight partners are based in six countries, all with large polymer industries, thus helping promote closer links and partnership within the industry.

REACH for Polymers project website:
http://www.reachforpolymers.eu/

REACH for Polymers Toolkit:
http://reachforpolymers.eu/reach/
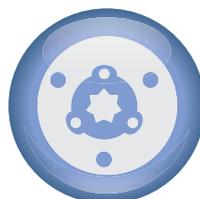
REACH for Polymers Toolkit User's Guide:
http://www.reachforpolymers.eu/downloads/
R4P%20toolkit%20-%20users%20guide.pdf/view
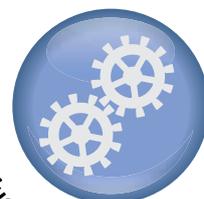

Raw Materials

Additives / Masterbatch

Processors

Product Manufacture & Assembly

Rubber Materials & Processing

Rubber Products

Contributors

Rapra Ltd: Project management, dissemination and technology transfer, monitoring and involving the industry (through membership).

SIRRIS: REACH, strong membership base, vast knowledge of metals and polymer processing, mechanics, electronics and IT, manufacturing industry and technology transfer.

CASO: Development of innovative IT applications for the polymer industry.

PROPLAST: Technology transfer, testing and analysis, processing, applied research, strong consortium membership and organisation of workshops and congresses.

PEP: Technology transfer, industrial workshops, design, assembly, research, industrial development, surveys.

Smithers Rapra: Dissemination and technology transfer, REACH, specialist publishing, environmental management within the target industries, environmental responsibility, testing and analysis and chemistry.

PIEP: Design, engineering, moulds and tools, eco-design and processing.

ASCAMM: Moulds and tools, industrial development and competitiveness, training, event organisation, technical validation and technology dissemination.

Problem

REACH is widely regarded as an important move, but it places a lot of pressure on a lot of businesses that comprise a very significant sector within the EU. The sheer complexity of it all can overwhelm many of the Smaller and Medium Enterprises who do not have the in-house capacity to deal with this extra work in understanding how they are affected by the legislation.

Just following the process of registering chemicals (and then the dossier preparation afterwards) may have such a financial impact on some companies that they would end up withdrawing certain chemicals from the European market. Furthermore, the legislation has the potential to cause businesses to avoid bringing alternative chemicals to the marketplace, placing barriers to entry on the market that were not previously there.

Screenshots from the Online Toolkits

Objective

The main objective of the REACH for Polymers project is to create a toolkit for the European polymer industry. By doing this, the partners aim to increase the industry's knowledge base on the subject of REACH and contribute to the development of innovative instruments relating to the legislation. The toolkit will provide an integrated approach, spanning the whole of a business from planning, R&D, purchasing and sales to supply chain management, manufacturing distribution and material selection.

✓ The first draft version of the REACH Toolkit was available for Pilot Testing by 43 companies. Overall, 18% were very positive about the *REACH Toolkit* in its Phase 1 state, whilst 44% were also generally positive. 36% had some ideas for improvements, whilst just 2% (i.e., 1 person) responded negatively.

✓ 13 companies participated in Phase 2 of the Pilot Testing. In all cases, either 12 or 13 respondents rated the various elements of the *REACH Toolkit* as Excellent, Very Good or Good. 10 of these companies then went on to participate in the final exercise.

✓ By 31st December 2012, 483 separate individuals had accessed the *REACH Toolkit*, 126 had formally registered, rising to 218 by end-February 2013. Partners are continuing to promote the REACH Toolkit in order to achieve the target results.

Problem

SMEs dominate the polymer industry and its supply chain and these companies are often very streamlined in terms of their resources – they don't usually have spare capacity and are focused on getting the job done. As a result, they are likely to be missing the knowledge base in-house to deal with this kind of challenge; for example there are different testing techniques that they may be unfamiliar with. This places a financial burden on SMEs, for example they may need to establish which techniques they should use to find out what specific versions of the regulation they should be complying with.

Objective

Assess the suitability of the testing techniques and methods within the polymer industry, and from this develop a 'user's guide', which will provide a solid technical background.

✓ The '*Best Available Testing Techniques and Methods Guide*' is available in printed and electronic form in the 5 project languages and also can be downloaded free of charge from the project website in all 5 project languages (English, Spanish, Italian, French and Portuguese).

✓ Over 100 printed copies were distributed, with an additional 1,000 distributed as pre-loads onto USB pens.

✓ 2,686 copies have been downloaded from the project website (1071 Spanish, 790 Italian, 331

French, 322 Portuguese and 172 English), this total rising to 3,647 by end-February 2013.

✓ Over 10,000 individuals have been e-mailed with the '*Best Available Testing Techniques and Methods Guide*' included as a file attachment.

Best Available Testing Techniques downloadable from the website: http://www.reachforpolymers.eu

Problem

Aside from the best testing techniques to use, there are a whole range of variables as to how to approach the chemical registration process. Oftentimes it is useful to understand how other companies are going about dealing with these challenges to see what the best established practices are.

Objective

Produce a REACH 'Best Practice Manual', which will build up the knowledge base of the polymer industry and its associated supply chain.

Based on the *State-of-the-Art Report, Benchmarking Survey* and the *Expert Workshop*, a '*European Best Practice Manual*' for the Polymer Industry was created. The Manual set out to provide the polymer industry with a systematic approach, effective methods and innovative tools to evaluate their REACH obligations:

✓ The *European Best Practice Manua*l was made available in printed and electronic form and as a download from the project website in all 5 project languages.

✓ 30 printed copies, 64 copies via CD and 1,000 copies pre-loaded onto USB pens were distributed to the European polymer industry.

✓ 1,778 were downloaded from the project website.

✓ The *European Best Practice Manual* was e-mailed as a file attachment to over 30,000 contacts.

Best Practice Handbook downloadable from the website: http://www.reachforpolymers.eu

Problem

An additional consideration in the whole process is that with legislation as complex as this, the best way to deal with it may not be immediately obvious. The wait-and-see approach is sometimes required, with many learning what to do (and what not to do) from their own experience, so what is considered the right thing when the legislation is first released, may not be a couple of years later. SMEs need to be kept apprised of the latest advice as the situation evolves. It's also important for those in-the-know, the people who really understand the REACH legislation, to gain an overview of how SMEs are coping with the process of complying with the legislation and complete the feedback loop.

Objective

Monitor and evaluate REACH in order to assess its impact on the European polymer industries, and discuss the findings with experts in the field. This will provide the foundations for developing industry-specific support measures and approaches.

Benchmark current awareness and readiness of the new REACH regulations within the European polymer industry and its supply chains.

State-of-the-Art

A thorough review of the REACH methodologies, best-practice and polymer industry trends showed that many companies did not have a comprehensive understanding of REACH and had not completed a risk assessment on how REACH will affect their business.

The findings of this review were compiled in a comprehensive 141-page *State-of-the-Art Report*, of which 150 printed copies were distributed, mainly at the K 2010 trade show in Germany (the largest European plastics trade show), along with 500 copies on USB pens. In addition, over 1,200 copies have been downloaded from the project website.
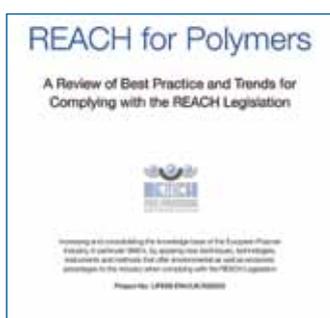
State of the Art Report downloadable from the website:
*http://www.reachforpolymers.eu*

Benchmarking Survey

The Benchmarking survey sought to gauge the level of awareness, attitudes, practices and understanding of the European polymer industries towards the REACH legislation and to measure its impact over two years.

The two-phase survey took place at the beginning and the end of the project, with 160 face-to-face interviews and the circulation of a questionnaire to over 2,400 relevant European polymer businesses. It was hoped that there would be a 20% increase in the level of understanding and knowledge thanks to the work of the project. The highlights from the report are as follows:

✓ The comparative results, taken after the second Benchmarking Survey, showed little increase in awareness of REACH legislation; however, this was already high at 92% in Phase 1.

✓ The global estimated level of knowledge (on a scale of 0 to 10) increased by around 20%, from 5.06 in 2010 to 6.06 in 2012.

✓ Phase 2 results showed an increase in preparation: 51% reported an above-average level of preparation for REACH (7–10 on the rating scale), compared with 42% in Phase 1. Overall findings showed a general improvement in levels of knowledge and awareness in all areas.

✓ The report was translated into 5 partner languages: English; Spanish; French; Portuguese; and Italian.
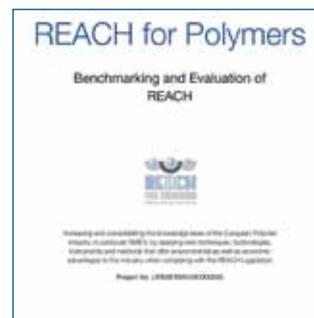
Benchmarking Survey downloadable from the website:
http://www.reachforpolymers.eu

Expert Workshops and Technology Roadmap

The main findings from the *Benchmarking Survey* reflected the levels of awareness and general attitudes by EU polymer SMEs to the REACH legislation. The results were used as the basis for a series of four *Expert Workshops*, which were planned to review and discuss the findings in more depth. These workshops were held in Spain, Belgium, France and the UK, with over 200 participants from a wide cross-section of the European polymer industry and its supply chains.

The results of the workshops were compiled as a *Technology Roadmap Report*, aimed at helping companies understand the multi-layered approach they must take to effectively integrate REACH legislation into their business.

✓ The final revised edition is available on the project website.

✓ 4 *Expert Workshops* were organised as add-ons to other industry events in Spain, UK, France and Belgium, with a total of 202 individuals participating.

✓ 345 downloads from the project website by 31st December 2012, rising to 426 by end-February 2013.

Photo of the Expert Workshop *in Louvain-la-Neuve, Belgium*

Problem

In amongst their day-to-day activities, SMEs need to absorb the important information coming their way and filter it out from the less important information. The key facts they need to know about how REACH will affect them need to be brought to their attention so that they don't miss out on helpful resources.

Objective

Provide dissemination materials and training activities in order to attract a broad audience, ensure a large take-up of the REACH Toolkit and increase the industry's knowledge and understanding of REACH.

Dissemination

In order to contact as many SMEs as possible and raise awareness of the new tools and resources available, a range of dissemination activities were organised. All member states in the EU-27 were targeted.

- **The Media**

  Press coverage is a good way to reach the intended audience, gaining the attention of the European polymer industry and its supply chain. Press Releases were published (at minimum) in the following number of publications/websites:

  o 15 English

  o 9 French

  o 2 Italian

  o 1 Spanish

  o 1 Portuguese

- **Other organisations**

  Each beneficiary had their own working relationships and contacts within the polymer industry and relevant trade associations. This meant that each partner could exploit these links to promote the project.

- **Social Media**

  Social media is an important modern medium for communication with a targeted, engaged audience. A LinkedIn group was created to promote the project, share information and encourage further discussion on the topic. The group attracted 125 Members:
  http://www.linkedin.com/groups?gid=3081024

- **Conferences, Seminars and Exhibitions**

  REACH for Polymers was widely promoted at a number of events throughout Europe. The most significant of these was holding a conference at the Plast Milan event, the largest polymer trade show in Europe. The conference was organised to discuss current awareness of REACH and to demonstrate the *REACH Toolkit*. Feedback from the attendees was positive, with 80% rating it useful or very useful.

In addition to the Plast Milan event, information was disseminated at events held within the following countries:

Germany 12	Belgium 2	Spain 3	UK 2
Austria 1	Switzerland 1	Italy 7	Poland 1
Portugal 2	France 3	USA 2 *	
REACH-based events with a significant number of attendees from the EU-27.			

- **Ezines, emails and mail-shots**

  Electronic promotion was the most cost-effective form of dissemination. The bulk of the press releases and ezines were distributed in the latter stages of the project to promote the substantial amount of resources available. All partners released ezines in their respective languages. In excess of 30 e-zines were distributed, some to targeted lists of approx. 2-5,000 contacts, others to broader lists of approx. 50,000 contacts. On average the e-zines were opened by approx. 10% of the audience, with some opened by as many as 50% of recipients.

An ezine distributed at the end of the project

- **Posters, flyers and USB pens**

  A series of flyers and posters were translated into the partner languages and disseminated throughout Europe. Posters and banners were displayed at exhibitions, conferences and in company foyers. Flyers proved to be an effective tool for promoting the project; again, these were easy to distribute at exhibitions and conferences, and they were included with polymer-related books purchased by Smithers Rapra customers. 3 flyers and posters were produced and translated into 3 or 4 of the partner languages.

A most effective method of dissemination was the distribution of USB pens, which contained the *European Best Practice Guide* and the *Best Available Testing Techniques and Methods Guide*. All partners disseminated the guides in both English and their own languages. 2,000 USB pens and 1,000 twist drives were distributed.

One of the Postcards produced for the project. Available for download from http://www.reachforpolymers.eu/

Workshops

A workshop was held in Lisbon, Portugal and there were 24 attendees, all of whom gave positive feedback about the event. A second planned workshop, to be held in Belgium, was unfortunately cancelled due to poor registration levels (See Lessons Learned section). Instead, an event was held in Liege at Plastiwin for local polymer-based industries, which included a *REACH Toolkit* demonstration and a discussion of the REACH for Polymers project. The feedback from the 54 attendees was again very positive. The third workshop took place as a webinar, which allowed for a wider attendance. Feedback was strong, with 89% of respondents agreeing that the webinar was useful/very useful.

Conferences

A conference was held in conjunction with the The Plast Milan trade show, which takes place every 3 years, attracting in excess of 40,000 visitors over its duration. Over 70 bookings for the conference were received, however in the event, only 35 individuals attended (See Lessons Learned section). Of the attendees, 75% rated the conference as good or very good and 80% rated it as useful or very useful. All non-attendees were contacted after the event and were provided with copies of the presentations made at the conference.

Photo taken at the first training workshop in Lisbon, Portugal, March 2012

Future Impacts

Based on the feedback received from the companies who participated in the Phase 2 of Pilot Testing, 92% of SMEs will find the *REACH Toolkit* useful in understanding and complying with REACH legislation. Together with the '*Best Available Testing*

Techniques and Methods' and the '*European Best Practice Guide*', SMEs will have a comprehensive set of resources that are also useful as stand-alone materials.

The general awareness of REACH has gradually risen over a number of years and this will continue as we head towards the final deadline in 2018. SMEs, in particular, are slowly becoming more mindful of the importance of the legislation and the impact it will have on their business. As demonstrated by the incremental changes shown in the *Benchmarking Survey*, it is expected that the free-of-charge resources created by the REACH for Polymers project will be used more and more by SMEs seeking out this type of information.

The majority of resources produced as part of the project were completed close to the end of the project period, therefore the reported figures for the access to resources only represent the initial uptake. As project partners continue to promote the project outputs over the coming years it is estimated that the number of visitors will increase. For example, there were 907 unique visitors to the project website from June to December 2012 of whom 456 had formally registered. Two months after the project end date (February 2013), the number of unique visitors had risen to 1,441. Both the project website and the *REACH Toolkit* will continue to be actively promoted by all partners, aiming to achieve the target visitor numbers during 2013.

Lessons Learned

Below are two key events during the project where lessons were learned and how the issues were overcome for the success of the project:

The second planned workshop, to be held in Belgium, had to be cancelled due to poor registration levels. Concerns were raised about the viability of attendees travelling to organised events across Europe.

Action: A web-based workshop was organised to target the EU-27 member states, ensuring a strong cross-section of the polymer industry. In the event, there were 38 attendees from around the EU, including the UK, Germany, Belgium, France, Switzerland, Italy, the Netherlands, Ireland and Denmark.

A conference was held in conjunction with the The Plast Milan trade show, which takes place every 3 years, attracting in excess of 40,000 visitors over its duration. Over 70 bookings for the conference were received, but in the event, only 35 individuals attended.

Action: An additional webinar (described above) was arranged to boost overall numbers and also to widen the spread of individuals participating in the *Expert Workshop* and *Conference* events dedicated to the REACH For Polymers project across Europe.

Both of these instances showed that SMEs who are already under pressure struggle to justify the cost (in terms of both time and expense) of travelling to events (be it dedicated or even alongside other bigger events). As they are the key target for this information, we needed to offer an easier route for them – in spite of the fact that the resources were being provided free of charge, the costs of attending were still prohibitive. Webinars offered a practical solution to this problem.

Conclusion – Objectives Achieved

The project's overall objective was to introduce and disseminate a framework for companies to understand, prepare for, and comply with the REACH legislation. Ultimately, the project will have engaged with at least 1,500 companies in depth and over 6,000 European companies overall. These are the companies that will typically have been least capable of managing themselves through the REACH process.

By reviewing the legislation and examining its impact, the project has enabled a wide range of companies, particularly SMEs, to increase their knowledge. So far, we have seen a 20% increase in knowledge and awareness of REACH, which represents as many as 1,800 businesses now better prepared to implement REACH legislation and accrue the associated environmental benefits.

Over 2,000 separate outputs have been downloaded by visitors to the project website. To ensure the legacy of the project, the website will be maintained until 2017 and over the next 5 years it will continue to enable the policy makers, trade bodies and industry experts in their pursuit for increased performance and lower environmental impact, extending the support measures needed to ensure the survival and future success of the industry.
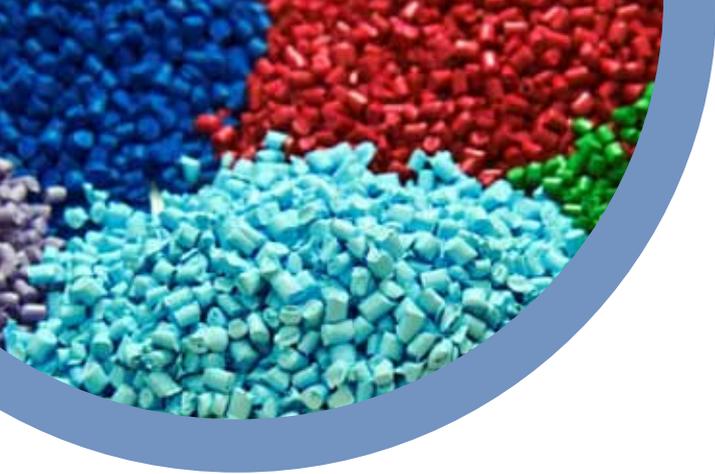
REACH for Polymers has developed a toolkit to help smaller plastics and rubber businesses in Europe to comply with REACH. REACH for Polymers focuses on:

- Testing Techniques and Methods

- Best Practice

- Monitoring and Evaluation

- Current Awareness and Training

To find out more register at **www.reachforpolymers.eu**