

**REACH - Implications of Europe's New Chemicals Policy on the textile and textile chemical markets.**



Described as “one of the most complex pieces of legislation to ever come out of Europe”, the Regulation for the Registration, Evaluation, Authorisation and Restriction of Chemicals or more commonly known as REACH, entered into force on June 1<sup>st</sup> 2007. The Regulation will drive major changes in the global chemicals industry most significantly, for manufacturers and importers of substances and preparations into the EU. However, considerable implications will also exist for companies that either use or process chemicals to manufacture products in the EU such as the textile, electronic and automotive sectors. Also affected by the REACH Regulation are manufacturers and importers of products that are designed to emit chemicals such as fade-out jeans, pens and adhesive tape, as well as products which have an unintentional release of chemicals due to their properties such as clothing and furniture.

The REACH Regulation, which implements the EU's New Chemicals Policy will replace four major pieces of existing EU legislation controlling chemicals, with a single uniform system. It will make chemical Manufacturers and Importers responsible for 'Registering' substances manufactured or imported into EU Member States, in volumes greater than 1 tonne per manufacturer/importer per year. Registration timelines have been prioritised



according to volume and hazard and will be “phased in” over time. The first substances to undergo Registration by the deadline of December 2010 will be substances imported or manufactured in volumes greater than 1,000 tonnes or more per year and ‘substances of very high concern’ such as: mutagens, carcinogens and reproductive toxins (CMR substances). The second registration deadline of June 2013, will capture substances in the volume bracket of 100-1000 tonnes per year. Finally, substances placed on the market in volumes greater than 1 tonne per year will need to be registered by June 2018. Failure to register a substance with the newly established European Chemicals Agency (ECHA), based in Helsinki, will make it unlawful to manufacture or import a substance into the European Union.

### **REACH Terminology**

The REACH Regulation employs some terminology which, although not complex, is important to understand from early on. A **Substance**, is in effect, a single chemical. A **Preparation** is a mixture of chemicals. While an **Article**, is an object that has a defined shape, which determines its function to a greater degree than does its chemical composition. Plastic chips therefore, may be regarded as substances or preparations but when manufactured into fibre becomes an article. Fibre, fabric and apparel are all therefore, considered to be **Articles** under REACH.

### **Pre-Registration**

As a first requirement for manufacturers and importers of chemicals, careful consideration should be given to ‘Pre-Registering’ substances during the Pre-Registration window, which extends from 1<sup>st</sup> June 2008 to 1<sup>st</sup> December 2008. The Pre-Registration process is straightforward compared to full Registration, and will require the submission of a limited amount of information, such as contact details and estimated tonnage band. Pre-Registration is designed to enable the authorities to calculate the number and volumes of chemicals on the market and to ease the formation of ‘Substance Information Exchange Fora’ (SIEFs) whereby manufacturers and importers will be able to work together to compile the necessary information and to share the costs to fully Register chemicals. Failure, to Pre-Register chemicals will exclude manufacturers and importers from taking advantage of the ‘phase in’ arrangements, forcing Registration to begin from June 2008. The pre-registration deadline therefore is an important deadline and should not be overlooked.



### **Registration:**

During the Registration process, EU manufacturers and importers of chemicals will have to compile and submit a Registration Dossier that should prove they are managing their chemicals safely. This will involve generating and assessing hazard data on the physiochemical, toxicological and eco-toxicological properties of a substance. For substances manufactured or imported in volumes greater than 10 tonnes/year, a Chemical Safety Report (CSR) will also have to be submitted to the European Chemicals Agency. In addition to reporting the hazard data associated with a substance, the intended uses along with the associated risks and proposed risk management measures, in the form of 'exposure scenarios' for each intended application of the substance will also have to be detailed. These exposure scenarios will eventually be communicated to the 'down stream users' of the substance, as annexes in Safety Data Sheets.

### **'Only Representative'**

Companies based outside the European Union also have the option to Register substances imported into Europe in quantities over one tonne per year, by appointing an 'Only Representative' to act on their behalf. In this scenario the EU importers effectively become 'downstream users' of the substance in question, and will not have to undertake the expensive registration themselves. Despite the costs and resources involved, registering a substance using an 'only representative', ensures that non-EU manufacturers can continue to export freely to the EU and will prevent their individual EU customers having to Register the substance independently. Companies manufacturing dyes and other textile chemicals which are exported to Europe should seriously consider this option.



### **‘Articles’ and Fade-out Jeans**

Registration requirements also exist where a ‘substance’ in an ‘article’ is designed to be emitted during normal and foreseeable conditions of use, for example, a printer cartridge or a pen. Existing REACH guidance specifies that the dye used in fade-out jeans is viewed as an intentional release and will consequently require Registration. To illustrate, consider a company importing fade-out jeans into the EU. If the dye is present in quantities greater than 1 tonne per year, per importer; it follows that the importer will need to Register the dye *if*, the dye in question has not already been registered for that intended use. Manufacturers of articles should now be determining if chemicals in their products are designed for release under normal foreseeable conditions.

### **Sizing Agents on textiles imported into Europe**

However, the situation is not so clear in those instances where companies import fibre or fabric into Europe containing sizing agents and other processing chemicals. There are many who would argue that sizes are added to fibre, which are then ‘intended to be released under normal or reasonable foreseeable conditions of use’, as specified in the legislation. However, the current draft guidance documents appear to be rather unclear on how such chemicals will be tackled. The situation is further complicated by the fact, that sizing agents are often polymers, which are presently excluded from REACH although, the monomers used to manufacture them will need to be registered. The message here is ‘watch this space!’

### **‘Articles’ containing ‘substances of very high concern’.**

Another aspect of the REACH Regulation addresses ‘articles’ containing ‘substances of very high concern’. These are substances such as carcinogens, mutagens and reproductive toxins and substances that are persistent, bioaccumulative and toxic in the environment. It is conceivable that some textile chemicals such as **flame retardant finishes**, may be viewed as falling under the scope of the later category. In this instance, there will be a requirement to ‘notify’ the authorities, where articles such as textile products, are imported into Europe containing such chemicals in quantities totalling over 1 tonne per year, present in concentrations greater than 0.1% and have not already been registered for that use. The authorities may subsequently request that these substances are registered.



### **Preparation for REACH**

To ensure continued access to the European market, it is critical that chemical manufacturers and importers begin to evaluate their REACH obligations and the options available to them. Downstream users of chemicals will also need to ensure that their use of a substance is registered by Manufacturers/Importers. Whilst, it is probably still too early to begin approaching suppliers to enquire about their Registration plans, early preparation is essential. As a first step, downstream users should now be reviewing their product portfolios, identifying their suppliers per product and the quantities purchased and determining their own position in the supply chain i.e. Manufacturer, Importer or Downstream User. In the years ahead, downstream users should be aware that they will eventually be called upon by their suppliers to provide 'use' and 'exposure' information and to comment on risk management measures as well as passing any new hazard information to their supplier.

### **Evaluation**

Once the Registration Dossiers have been received by the authorities they will be evaluated for completeness. A more detailed evaluation will be undertaken by the Competent Authorities in Member States countries, which may result in a request for further testing.

### **Authorisation**

For 'substances of very high concern', Authorisation will be required before use. Industry will be able to continue to manufacture and use these chemicals, if the risks can be adequately controlled or, where there is a strong socio-economic argument for doing so. Such chemicals will however, need to be substituted if safer alternatives are available and are technically and economically viable. The initial list of chemicals that meet the criteria for 'substances of very high concern' will be issued in 2009.

Despite the years of debate and controversy REACH is finally a reality. REACH is not simply a 'chemicals industry' Regulation, it will affect multiple industries and require management over many years to come. Early preparation is essential to minimise the business risks and to ensure continued access to chemicals. For further information on REACH please go to <http://www.reach-answers.com/>



## **Contact WSP Environmental**

As a leading global environmental consultancy, WSP Environmental has a network of specialists able to advise on the issues and impacts of REACH legislation.

This team includes experts in toxicology, eco-toxicology, risk assessment and product stewardship.

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