

REACH Legislation - Effects outside of Europe

Electrolube, a division of H K Wentworth Limited, is a leading manufacturer of electro-chemicals for electronics and industrial manufacturing. Electrolube's products are widely used for the manufacture and maintenance of electrical and electronic components worldwide. Research and development, quality and environmental concerns are fundamental to the Electrolube philosophy of providing the highest level of customer service. Recently, the level of support Electrolube provides for its customers has expanded, encompassing REACH.

REACH (Registration, Evaluation and Authorisation of Chemicals) is a new EU regulation that affects all areas of the chemical industry. Manufacturers, importers, distributors, downstream and end users alike all need to be aware of their involvement with the regulation. Although REACH is complex, replacing approximately 40 pieces of legislation, the main aims are clear; to improve protection and awareness regarding the risks of chemicals to human health and the environment whilst enhancing the development of the EU chemicals industry.

Unlike previous directives and regulations, within REACH the burden of responsibility for proving that a substance is safe for the specified uses has been assigned to industry rather than authorities. A registration to the European Chemicals Agency (ECHA) is required for any chemical substance that is brought into the EU in quantities greater than 1 metric tonne per company, per year. This applies to individual chemical substances, chemical substances within a preparation or blend (i.e. a final product) and substances that are intentionally released from articles. The registration will include test data to show the effect of use of the substance on human health and the environment. A phase-in period of 11 years, starting in 2007, has been assigned to allow gradual implementation of the regulation.

For companies that import chemicals into Europe or manufacture substances, the REACH registration process involves:

- Determining the chemical identity of each substance brought into Europe.
- Calculating the quantity of these imported/manufactured per year.
- Determining if any of these are exempt from the regulation, for example if they are natural materials.
- Pre-registering the substances within the allocated period between June and November 2008.
- Communicating down the supply chain to determine the downstream uses of each substances being registered.
- Preparing the registration of each of these substances by sharing test data with other registrants, and where necessary to agree classifications.
- Submitting registrations by the appropriate deadline.

Substances that have not been pre-registered cannot be imported into the EU in quantities over 1 tonne per year until the registration is complete. It is therefore no surprise that chemical suppliers are continually been contacted by customers seeking assurance of continuity of supply. The registration deadlines will depend on the quantity of substance used by the importer/manufacture and the risks

posed to human health and the environment. Substances of very high concern (SVHCs), such as those that are carcinogenic or bio-accumulative, will be identified during the process and their use restricted. Identified SVHCs will be prioritised within REACH and the registration deadlines will be earlier than for other less harmful substances. By increasing awareness of chemicals that are harmful to human health or the environment downstream users will be encouraged to source safer alternatives, widening the market for suppliers with the capability to be innovative and environmentally aware.

Although registrations can only be completed by legal entities within Europe, importers cannot prepare registrations without the support of the upstream supply chain. There is confusion surrounding finished products and although many will be exempt, any chemical that could be released from an article, such as lubricant on a switch, is under the scope of REACH. One of the main tasks for importers is determining the quantity and identity of imported chemicals within articles. Therefore, the registrant needs to know exact chemical identity, import quantities and impurity levels; formulated products or mixtures of chemicals, are treated the same as individual chemical substances and so the same rules apply. For many companies, including those that export directly to Europe or those with customers that export, this will mean increasing both the quantity and detail of the information provided. This can be avoided by the exporter or an upstream supplier appointing a legal entity within Europe (an Only Representative) to register on their behalf. This will require volunteers to take on the responsibility and associated costs, however.

Downstream users within the EU, who purchase the chemicals they use from within Europe, are only required to gain assurance of REACH compliance from their direct suppliers and ensure that the suppliers are aware of how the chemical is used. This information will be used to determine what testing is required for the registration and hence establish if the chemical substance is safe for the use. It will also allow the importer or manufacturer of the substance to then provide relevant information on safe handling procedures. Previous legislation in Europe has required chemical suppliers to provide health and safety information of the chemicals or preparations without consideration of the final use, thus presenting many irrelevant potential hazards to the user.

Although guidelines have been provided for the phase-in period, there still appears to be some confusion within the supply chain as to what is actually required in order to be REACH compliant. Many downstream users within Europe are requesting information such as pre-registration reference numbers from their suppliers, as confirmation that the chemicals they use are compliant. Although willingness to pass such information down the supply chain may be used as a marketing tool, it may also lead to the disclosure of commercially sensitive information such as formulation details of preparations. As there is no obligation for registrants to notify downstream users of such details, in reality it is often withheld by at least one member of the supply chain and hence only a general compliance statement reaches them.

Electrolube, like many other suppliers, have set up a dedicated email address to ensure that all REACH related correspondence are directed immediately to the

appropriate team of people. The team are actively involved in communications both up and down the supply chain and are therefore aware of the latest registration status for each material. The supply and manufacture of products spreads beyond the EU, making Electrolube and similar companies alike both manufacturers and importers. The REACH correspondence team is therefore vital to ensure a successful registration process and in turn avoiding any delay or discontinuation of supply to customers worldwide.

In summary, the process of registration, evaluation and authorisation of chemicals may seem somewhat cumbersome but it portrays that an increased level of knowledge will be achieved by its implementation. With environmental concerns at an all time high, it is to be expected that the chemical industry must also adapt to 'greener' times and as such the development and evolution of the European chemicals industry has begun.

REACH@hkw.co.uk
Jade Bridges, R&D Manager
Amanda Stuart, Development Chemist