

## Electrolube - REACH Legislation

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 wide 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.

In the past, research and development in the EU chemicals industry has been somewhat hindered by the slow identification and assessment of risks. Unlike previous directives and regulations, within REACH the rules for 'existing' and 'new' chemicals are the same, and the burden of responsibility for proving that a substance is safe for the specified uses has been assigned to manufacturers and importers 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 used to produce a preparation or blend (i.e. a final product) and substances that are intentionally released from articles. An article is an item whose shape, rather than composition, is more significant to its function.

One of the first tasks for companies to ensure REACH compliance was to determine total cumulative manufacturing and import quantities of each chemical substance. Software packages have been developed to aid this arduous task however due to the extent of the regulation this task is still somewhat vast. There are many exemptions from REACH to consider, such as natural materials, polymers, and various substances covered by other pieces of legislation. Determining which substances meet exemption criteria will reduce workloads and cost significantly, which should inevitably reflect in pricing further down the supply chain. Hence, a good understanding of the regulation by manufacturers and importers is crucial to the chemical market as a whole.

To cope with this massive task of registration and evaluation of the vast array of chemical substances, a phase-in period of 11 years has been assigned. A six month period during 2008 was provided allowing all potential registrants to pre-register the substances they import/manufacture and take advantage of the phase-in period. Without pre-registration substances cannot be brought into Europe until

registration is complete. It is therefore no surprise that chemical suppliers are continually being contacted by customers seeking assurance of continuity of supply.

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 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 downstream users.

REACH still requires significant improvement of communication through and across chemical supply chains, however. Information needs to be passed up the supply chain from the end users of each chemical substance, enabling manufacturers to collect data on the 'in use' properties and the impact on human health and the environment. The risks associated with the use of each chemical substance should then be passed back down the supply chain to all users. 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 potential hazards to human health and/or the environment.

The distribution of information goes further than simply through the supply chain. Data on the health and environmental effects of substances must be shared between registrants of the same chemical substance and non-registrants who own such data. This circulation of data, formally known as Substance Information Exchange Forums (SIEFS), is designed to help minimise and prevent duplicate testing on vertebrate animals. This creates an unusual need for communication between manufacturers and importers at the same level of the supply chain and requires cooperation by all to ensure an agreed classification and labelling of a chemical substance is reached, when appropriate. Joint registrations would minimise the costs of the registrations but would also require further information disclosure, such as usage quantities, between companies that are potentially direct competitors in the marketplace. Although this is controversial, it will minimise the impact of the costs associated with registration and hence keep the chemical marketplace competitive.

The registration deadlines will depend on the quantity of substance used in the EU and the risks posed by the chemical substance 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.

The costs of the data collecting, safety assessments and registration process may make some chemicals unprofitable to industry, leading to limited availability or complete withdrawal from the market. Added to the likelihood that some harmful

substances will not be given authorisation for use, there will undoubtedly be a need for alternatives to be identified and formulations of affected preparations altered. The aims of the regulation are being achieved by forcing industry to seek safer alternatives to certain chemicals, and consequently reducing the risks to health and the environment for the future.

Although REACH is a European regulation and the responsibility for registration is with importers, cooperation between members of the international supply chain is vital for overall success. Importers are required to know the exact chemical identity and quantities of individual substances they bring into the European market from their suppliers. In the case of preparations or blends, sensitive formulation information may have to be obtained, potentially from suppliers who do not fully understand the implications of non-compliance.

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.

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