

REACH (Registration, Evaluation, Authorization and Restriction of Chemicals)

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Registration, Evaluation, Authorization and restriction of Chemicals (REACH) is a European Union Regulation of 18 December 2006. REACH addresses the production and use of chemical substances, and their potential impacts on both human health and the environment. Its 849 pages took seven years to pass, and it has been described as the most complex legislation in the Union's history and the most important in 20 years. It is the strictest law to date regulating chemical substances and will impact industries throughout the world. REACH entered into force in June 2007, with a phased implementation over the next decade.

REACH is a new European Community Regulation on chemicals and their safe use (EC 1907/2006). It deals with the **Registration, Evaluation, Authorisation and Restriction of Chemical substances**. The new law entered into force on 1 June 2007.

The aim of REACH is to improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances. At the same time, innovative capability and competitiveness of the EU chemicals industry should be enhanced. The benefits of the REACH system will come gradually, as more and more substances are phased into REACH.

The REACH Regulation gives greater responsibility to industry to manage the risks from chemicals and to provide safety information on the substances. Manufacturers and importers will be required to gather information on the properties of their chemical substances, which will allow their safe handling, and to register the information in a central database run by the European Chemicals Agency (ECHA) in Helsinki. The Regulation also calls for the progressive substitution of the most dangerous chemicals when suitable alternatives have been identified.

History. REACH is the product of a wide-ranging overhaul of EU chemical policy. It passed the first reading in the European Parliament on 17 November 2005, and the Council of Ministers reached a political agreement for a common position on 13 December 2005. The European Parliament approved REACH on 13 December 2006 and the Council of Ministers formally adopted it on 18 December 2006. Weighing up expenditure versus profit has always been a significant issue, with the estimated cost of compliance being around 5 billion euro over 11 years, and the assumed health benefits of saved billions of euro in healthcare costs. However, there have been different studies on the estimated cost which vary considerably in the outcome.

A separate regulation – the CLP Regulation (for "Classification, Labelling, Packaging") – implements the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS) and will steadily replace the previous Dangerous Substances Directive and Dangerous Preparations Directive. It came into force on 20 January 2009, and will be fully implemented by 2015.

Overview. When REACH is fully in force, it will require all companies manufacturing or importing chemical substances into the European Union in quantities of one tone or more per year to register these substances with a new European Chemicals Agency in Helsinki, Finland. Because REACH applies to some substances that are contained in objects ('articles' in REACH terminology), any company importing goods into Europe could be affected.

About 143,000 chemical substances marketed in the European Union were pre-registered by the 1 December 2008 deadline. Although pre-registering was not mandatory, it allows potential registrants much more time before they have to fully register. Supply of substances to the European market which have not been pre-registered or registered is illegal (known in REACH as "no data, no market").

REACH also addresses the continued use of chemical 'Substances of Very High Concern' (SVHC) because of their potential negative impacts on human health or the environment. From 1 June 2011, the European Chemicals Agency must be notified of the presence of SVHCs in articles if the total quantity used is more than one tone per year and the SVHC is present at more than 0.1% of the mass of the object. Some uses of SVHCs may be subject to prior authorization from the European Chemicals Agency, and applicants for authorization will have to include plans to replace the use of the SVHC with a safer alternative (or, if no safer alternative exists, the applicant must work to find one) - known as 'substitution'. As of March 2009, there are fifteen SVHCs.

REACH applies to all chemicals imported or produced in the EU, in contrast to the US Toxic Substances Control Act which only applies to chemicals newly coming into use. The European Chemicals Agency will manage the technical, scientific and administrative aspects of the REACH system.

The European Commission supports businesses affected by REACH by handing out - free of charge - a software application (IUCLID), which simplifies