

REACH is a new European Community Regulation relating to chemicals and their safe use (EC 1907/2006). The new law entered into force on 1 June 2007. It deals with the Registration, Evaluation, Authorisation and Restriction of Chemical substances. The aim of REACH is to improve the protection of human health and the environment through better and earlier identification of chemical substance properties, while at the same time enhancing economic efficiency.

Registration of chemical substances under REACH needs to be done by every EU manufacturer and importer, who brings the chemical substance into the EU. Chemicals manufactured in volumes of 1 ton or more per year and per manufacturer/importer are automatically encapsulated in REACH. Transitional provisions apply for all substances that are currently on the market. For these so-called phase-in substances pre-registration is needed, to enable manufacturers and importers of the same substance to share data and to avoid duplicating work. The pre-registration of phase-in substances starts at 1 June 2008 and will end 6 months later. After the pre-registration period the European Chemicals Agency (ECHA) in Helsinki will publish a list of pre-registered substances. This list is a platform for 'downstream users' to check whether or not the substances they use are likely to remain on the market.

For the registration, manufacturers and importers are required to gather information on the properties of their chemical substances, which will allow their safe handling, and to register this information via a central database run by ECHA. All uses within the supply-chain need to be identified and risk reduction measurements need to be assessed to allow safe use of a substance with regards to humans and the environment. In this context, all parties in the supply chain will need to communicate with each other to ensure that, as far as possible, registrations of substances take account of all usage. For the registration, higher tonnage substances require the most data, and have to be registered first. Lower tonnage substances require less data and can be registered later, but before 1/6/2018.

Through evaluation, public authorities will look in more detail at registration dossiers and at substances of concern. Use-specific authorisation will be required for chemicals that cause cancer, mutations or problems with reproduction, or that accumulate in human bodies and the environment. ECHA will act as the central point in the REACH system: it will manage the databases necessary to operate the system, co-ordinate the in-depth evaluation of chemicals of 'high concern'. ECHA's database is for public use in which consumers and professionals can find hazard information.

REACH also calls for the progressive substitution of the chemicals of 'high concern' when suitable alternatives have been identified.

REACH governs the production, import and use of substances and not of preparations (physical mixtures or solutions of two or more substances) or articles. Substances in preparations fall under REACH and have to be registered.

Polymers are initially exempted from registration and evaluation until a practicable, cost effective solution has been established to select them on the basis of recognized criteria. Monomers and other starting substances used in their manufacture, however, must comply with the regulation.

Most commercially available plastics contain additives next to the base polymer, and are hence to be considered as preparations whose substances have to be registered, evaluated and, where necessary, authorised.

