

Supply Chain Communication

Safe Use for all Identified Uses

The REACH regulation sets a number of new requirements with respect to the use of chemical substances and the associated communication between suppliers and customers. One of the new requirements is the demonstration of “safe use”. This implies that all actual uses of all substances that need registration must be identified by or reported to the registrant (Manufacturer/Importer). This is done during the Use Alignment Process. After this process the registrant has to investigate whether the identified uses can be considered as safe. This analysis is made in the Chemical Safety Assessment.

In the Chemical Safety Assessment the Manufacturer/Importer has to demonstrate safe use of the substance throughout the whole lifecycle (manufacture, formulation, end-use, waste). The outcome of the assessment is a set of Operational Conditions and Risk Management Measures which help to achieve safe use. This information is laid down in the Exposure Scenario which will be communicated after the registration via the extended Safety Data Sheet (extSDS). It will be the legal duty of Downstream Users to follow the instructions stipulated in the Exposure Scenario.

Exposure and Safe Use

The “use” of a chemical substance conceived by REACH as any activity (e.g. processing, formulation, mixing, filling, and production of an article) which is carried out with a substance as such or in a preparation could lead to some form of “exposure” of humans or the environment. Exposure infers some form of contact of humans and/or the environment with chemical substances whereas the contact can occur short term, long term, once or more often, in low or high concentrations.

For industrial safety and for protection of humans (workers and consumers) and the environment, the way, the duration and the concentration at which substances with hazardous characteristics are applied is crucial. In this context “safe use” means that the

Downstream User can demonstrate that exposures are so small or not existent that no harmful effects to humans and the environment are to be expected to occur.

The “safe use of chemicals” is the fundamental aim of the REACH Regulation. One important step to achieve safe use is to assess all potential exposures. Manufacturers and Importers as well as their customers in the role of Downstream Users have their obligation in this regard. Safe use is dependent on several preconditions: good knowledge of substance properties, of conditions of use, of any exposure as well as the development and implementation of appropriate risk management measures to adequately control the risks. While the Chemical Safety Assessment (CSA) evaluates whether the intended uses of a substance are “safe”, it is the Exposure Scenario (ES) that describes the conditions for safe use of a substance, in particular the conditions of safe use and the risk management measures.

Use Descriptors

To structure the large number of different uses of substances and preparations present in the different industry sectors ECHA has developed a system to describe uses in a standard and structured way. This so called “Use Descriptor System” is based on five separate categories. Each category has pre-defined descriptors which in combination with each other form a brief description of use. The five categories are: sector of use (SU), chemical product category (PC), process category (PROC), article category (AC) and environmental release category (ERC).