

Exposure Scenarios According to REACH

Safe application of WEBAC products: the REACH Regulation (EC No. 1907/2006) – addresses the Registration, Evaluation, Authorization and Restriction of Chemical Substances (REACH). According to REACH, all manufacturers, importers and downstream users must ensure that the substances they manufacture, place on the market and use do not have any negative impacts on human health or the environment.

Substances must be registered with the European Chemicals Agency (ECHA). These data are published on the ECHA Homepage and are thus accessible to all downstream users.

The next obligation concerns information exchange in both directions within the supply chain. Suppliers must pass on their knowledge of substances and the risks associated with their known uses to their customers. Conversely, it is important for downstream users to check that their uses are covered and suggested risk minimization measures are complied with, and to report gaps back to their suppliers.

Under REACH, the use of the substances is dealt with by means of standardized use descriptors (SU, PC, PROC), environmental release categories (ERC, SPERC) and exposure categories. These terms are described in the table below and have been translated to examples of practical applications from the construction sector.

To describe conditions for the safe use of the substances it is considered in what way the user is exposed to the substances: these are the exposure scenarios frequently referred to. For formulations which consist of several ingredients – as is the case with WEBAC products – the data of all ingredients must be taken into consideration. If no initial exposure scenarios are provided by the supplier, a risk assessment takes place.

The exposure value is calculated for each substance on the basis of these data and related to its limit values (the PNEC or DNEL reference values). If the ratio is less than 1, the application under the described technical and personal risk management measures is safe.

As a formulator of construction chemicals, WEBAC is itself a downstream user. Due to continuous communication with our raw materials manufacturers we ensure that only pre-registered or registered substances are used in our products and that the use of the substances is covered by the exposure scenarios. This knowledge is constantly updated in our safety data sheets and passed on to our customers. For safe handling and use of our products, you must as a user observe the Technical Data Sheets and the risk minimization information specified in the safety data sheets.

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Descriptor	Category	"Translation"/Example
Sector of Use (SU) describes in which economic sector the substance is used	SU 22 Commercial uses: public domain (administration, education, entertainment, services, craftsmen)	Main user group: commercial users
	SU 19 Building and construction industry	End users: craftsmen, building contractors
Product Category (PC) describes the types of chemical product delivered for final use	PC 1 Adhesives, sealants	Injection resins, injection foam resins, injection gels, sealing compound for joints, surface sealants
	PC 9a Coatings and paints, thinners, paint removers	Primers, coatings, cleaners
	PC 9b Fillers, putties, mortar, modeling clay	Putties, set-up agents, quick-setting cement
	PC 0 Other products	
Process Category (PROC) describes the application techniques defined from an occupational health and safety perspective	PROC 8b Transfer of substance or preparation (charging/discharging) from/to mixing vessels/large containers at dedicated facilities	Filling of partial quantities for application, mixing of components including transfer to or refilling into the hopper
	PROC 10 Roller application or brushing	Manual application by brush, roller or trowel
	PROC11 Spraying outside industrial settings	Spraying for surface coating
	PROC 13 Treatment of products by dipping or pouring	Application by 1C or 2C pump; manual cleaning of equipment
Environmental Release Class (ERC) describes the conditions of use from an environmental perspective.	ERC 8c Wide dispersive indoor use resulting in inclusion into or onto a matrix	Use indoors, e.g. application of a primer to mineral substrates. The product cures completely.
	ERC 8f Wide dispersive outdoor use resulting in inclusion into or onto a matrix	Use outdoors, e.g. injection into building components (with ground contact). The product cures completely.

Table: Examples of typical uses of WEBAC products