

MATERIAL HEALTH CERTIFICATION

A STRONG EVIDENCE FOR MATERIAL HEALTH, PRODUCT SAFETY AND ECOLOGICAL QUALITY

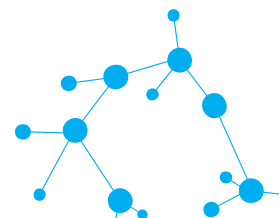
Climate change, food shortages, plastic waste and the extinction of species constantly require new strategies and alternative solutions. The Cradle to Cradle® principle provides answers to how products can be designed in such a way that they remain in the cycle of goods as "nutrients" and do not become waste. This results in products made from materials that are recyclable and environmentally friendly.

A valuable element in optimizing products on the way to Cradle to Cradle is the Material Health Certification. This approach uses a globally recognized methodology for assessing material health. It enables manufacturers to learn more about the chemicals used in their products and avoid substances of concern – even across supply chains.

Independent experts assess the potential health risks of each chemical in a product throughout its life cycle. The first step in this process is to identify and define the ingredients used in the product. The result forms the starting point for the redesign or development of a new product concept. Based on an ABC-X categorization, the defined ingredients can then be evaluated and optimized if necessary. The latter is the case, for example, when it comes to ingredients that are discussed because of possible risks to the environment and health. Only those who can meet all the strict requirements are awarded the Material Health Certificate.

A total of four certification levels for material health can be awarded to companies. In addition to compliance with strict evaluation criteria for all product components and ingredients, there are further demanding requirements at the different certification levels:

- ✓ The product does not contain any Banned List chemicals above the relevant thresholds. This prevents dangerous substances from accumulating in the biosphere and leading to irreversible negative effects on human health. Also excluded are substances which have hazardous properties in relation to their manufacture, use and disposal.
- ✓ The evaluated materials are free from carcinogens, mutagens, or reproductive toxicants.
- ✓ All requirements described in the standard for emission testing of volatile organic compounds (VOC) are met.



The legally compliant coating of food packaging taken a step further

FoodSafe is ACTEGA's brand of water-based coatings for the fulfilment of applicable food packaging regulations. In order to provide our customers with even stronger proof of material health, product safety and ecological quality, ACTEGA has now had its FoodSafe products evaluated and qualified according to the criteria of the Cradle to Cradle Certified™ Product Standard, category Material Health.

To this end, a selection of coatings was first reviewed and awarded a Gold Level Material Health Certificate by the Cradle to Cradle Products Innovation Institute. In a second step, the entire portfolio was then examined. In a comprehensive toxicologically evaluated raw material matrix, all ingredients of the FoodSafe portfolio were defined, evaluated and approved. As a result, the entire FoodSafe series was awarded the Gold level Material Health Certificate.

This innovative certification approach offers our customers many advantages. The fact that all ingredients used in the FoodSafe portfolio have been defined, evaluated and verified means a high level of safety. It also creates valuable flexibility, as new products can be developed from the matrix or products can be adapted to customer requirements without automatically losing the FoodSafe Gold status. This eliminates the need to go through a lengthy external certification process again. In addition, ACTEGA ensures instrumental-analytical monitoring of the raw material portfolio as well as continuous migration tests for the coating series.

FoodSafe is now Gold

FoodSafe coatings form the basis to produce legally compliant food packaging. They are formulated from a tested raw material matrix, enabling the entire FoodSafe range to be awarded the Gold level Material Health Certificate by the Cradle to Cradle Products Innovation Institute. FoodSafe is our portfolio of water-based coatings for the direct food contact, at least with dry and fat-including foods.

FoodSafe coatings have a low potential for migration and they do not contain undesirable constitutional components such as mineral oils (MOSH, MOAH), heavy metals or phthalates. They are compliant with the framework regulation EU No. 1935/2004 and the Plastics Directive EU No. 10/2011 (PIM). They also correspond to the Swiss Ordinance (SR 817.023.21) as well as to the Good Manufacturing Practice Regulation (EC) No. 2023/2006.

