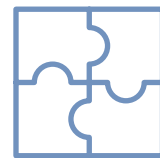


Substituting substances in coatings formulations - a complex and lengthy process



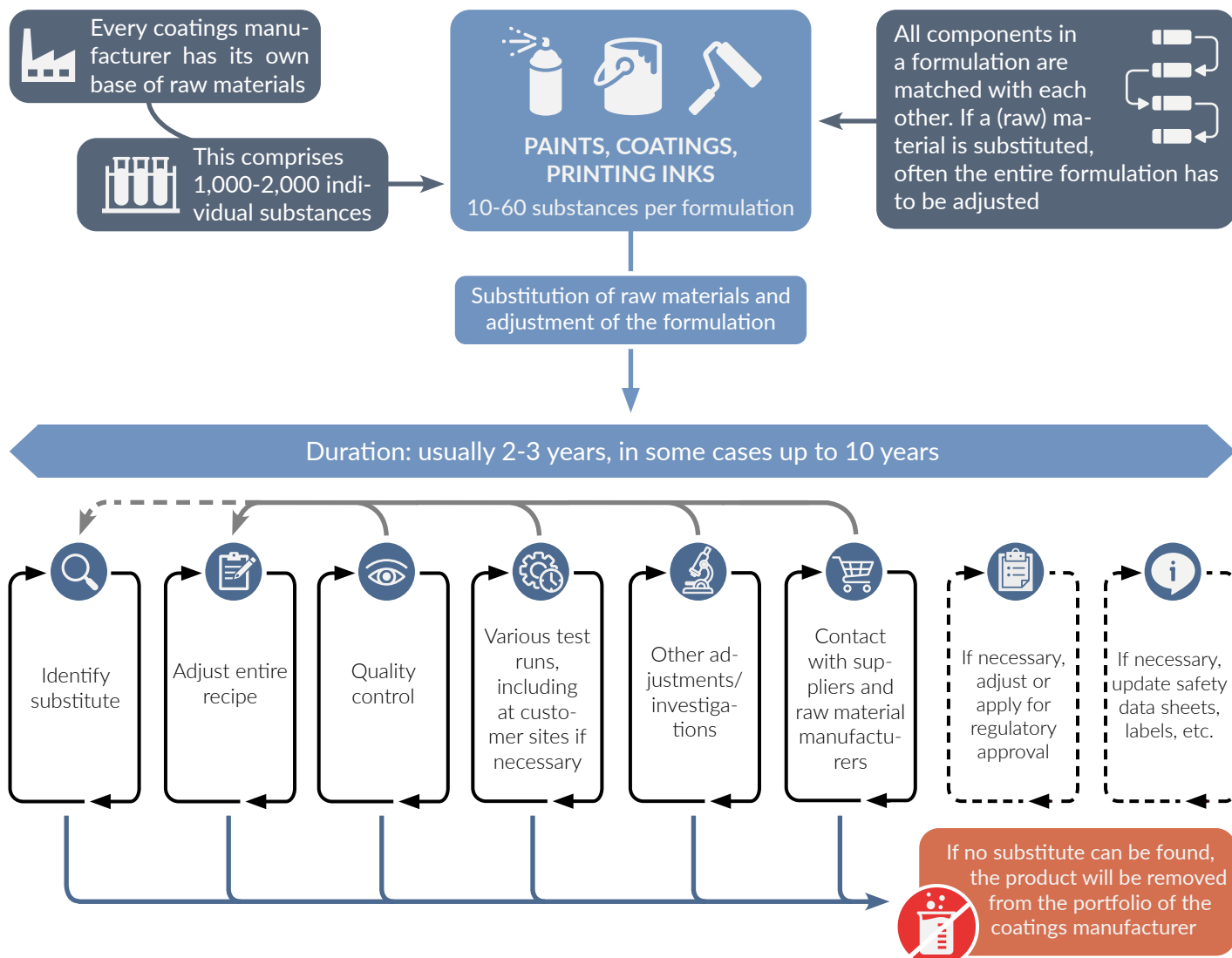
Paints, coatings, and printing inks are tailor-made formulations composed of raw materials which are specifically matched to one another to give the final product the desired functionality. Innovations, voluntary commitments, supply bottlenecks, or regulatory requirements often make it necessary to substitute substances. However, this is not a simple process. On the contrary: the components of a coatings formulation must match with one another and the result must be thoroughly tested – a time-consuming and complex process with no guarantee of success.

Specific requirements, targeted solutions

The areas of application for coatings, paints, and printing inks are extremely diverse: from interior walls and facades to garden furniture and cars, from wind turbines to electronic devices and food packaging. Each application has its own requirements in terms of resilience, safety, environmental compatibility, and appearance. That is why there is a huge variety of paints, coatings, and printing inks that are specifically developed for their respective purposes.

Costly, time-consuming, with no guarantee of success

The raw material base used by a coatings manufacturer is usually individual and comprises 1,000 to 2,000 individual substances. Coatings manufacturers often use mixtures supplied by the raw material manufacturers themselves. A typical recipe, also known as formulation, usually consists of 10 to 60 individual substances, such as binders, additives, and solvents, which are precisely matched to each other. If even one of these is substituted, the entire formulation often has to be redeveloped. This process usually takes two to three years, but in exceptional cases can take significantly longer. It involves numerous checks and tests at every stage of the supply chain and intensive communication with customers and suppliers, yet there is no guarantee of a successful reformulation. In some cases, the only option is to withdraw a product from the market altogether.





Aline Rommert

+49 (0) 69 2556 1705

rommert@vci.de