

Sinner's Circle

The secret to cleaning floors



In 1959, Dr. Herbert Sinner, a German chemical engineer who worked for Henkel, defined cleaning as a process that involves the interaction of 4 factors: temperature, chemical action, time and mechanical action. The four factors are variable but are still present in every cleaning operation. Only the balanced combination of these elements (which must be evaluated by examining the surface, the type and the degree of dirt) allows to obtain the optimal cleaning result. Indeed, in case one of the four factors is lacking, the others must be reinforced.



Temperature

According to the Sinner's Circle, temperature is a determining factor for ideal cleaning. In fact, it affects both the effectiveness of cleaning products and that of the cleaning process. Usually, higher temperature leads to higher reaction speed, always bearing in mind that some surfaces do not withstand high temperatures.



Chemical action

The factor related to the chemical action requires a correct choice of the cleaning product and its correct dosage. Using a detergent that is suitable for both the type of surface and the equipment used for cleaning can really make a difference on the final result.



Time

The time factor is essential in the cleaning phase and affects the Sinner's Circle in two ways:

- The reaction time required for the cleaning product to be effective.
- The total time required for cleaning, which is influenced by the type of surface to be cleaned, the type of contamination and the type of equipment used.



Mechanical action

In Sinner's Circle the factor linked to mechanical action is also called abrasive action. This is the force exerted on the cleaning unit and therefore the friction that is developed to eliminate dirt. The mechanical action can be manual or mechanical. With regard to this factor, the choice of the right equipment plays a fundamental role in obtaining optimal cleaning results.