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TOPIC(s) :

a solution to design greener chemicals. Applications to Flavour and Fragrance industry

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PURPOSE OF THE ABSTRACT

In recent years, an increasing awareness of sustainability issues has led to a wide range of initiatives in the flavour and fragrance industry. The end-users expect a sustainable product reducing carbon and water footprints, using renewable resources and minimizing hazards.

MANE's commitment to sustainable innovation is to design more eco-friendly chemical products and processes so as to reduce or eliminate the use of hazardous substances. However, there was no satisfactory method to clearly prove to the customer that a flavour or a fragrance is sustainable.

The green chemistry philosophy provides useful guidelines to design safe products for health and environment. This is why MANE decided to design its own assessment tool named GREEN MOTION? based on the 12 principles of Green Chemistry.

During the conference, this novel method will be explained to measure the greenness of chemicals on a 0 to 100 scale. It is a new and easy to use solution available and suited for chemists leading to greener chemicals. It helps for process development from laboratories down to industrial workshops, providing a new benchmark for continuous improvement. More than one thousand ingredients have been rated, demonstrating the robustness of the method, and building a useful database for further benchmarking.

FIGURES

FIGURE 1

FIGURE 2

KEYWORDS

BIBLIOGRAPHY