

## **FRAGRANCE SOLUBILIZING PROPERTIES OF BIO-BASED ALKYL POLYGLUCOSIDES AND THEIR IMPACT ON THE AESTHETIC AND FUNCTIONAL CHARACTERISTICS OF A MODEL CLEANSING COMPOSITION**

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Consumer demand for cosmetic products that are more natural and safe for the environment has recently triggered the development of bio-based ingredients for skincare. In cleansing products for hair and skin, the choices for bio-based ingredients are limited and information is not readily available to predict their ability to solubilize fragrances oils compared to surfactants typically used for such products. Fragrance hedonics could be affected by the surfactant system due to changes in vapor phase composition and concentration. The objective of this study was to investigate the fragrance solubilizing property of ECOCERT-listed alkyl polyglucosides (APGs) in a model sulfate-free cleansing formulation, which may impact the aesthetic and functional characteristics of the product. The experimental design included fragrance accords with different average cLogP and chemical class, APG chain length (C8/C10, C7, C10) vs. sodium lauroyl sacrosinate, and ratio of fragrance accord to surfactant. The effects of these variables on several properties were measured (product clarity, phase separation, foam quality, bloom, vapor phase properties) and will be discussed during the conference.