



Required Hydrophilic-Lipophilic Balance Values of Octyldodecanol from Emulsion Stability Tests and Relative Dielectric Permittivity Measurements

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SUMMARY. Although octyldodecanol has been used for several decades as an ingredient for emulsions, no required Hydrophilic-Lipophilic Balance (HLB) values for this alcohol were found in the literature. The purpose of this paper is to present the results of the experimental determination of the required HLB values, from emulsion stability tests and from low-frequency relative dielectric permittivity measurements. The required HLB values obtained from emulsion stability tests for oil-in-water and water-in-oil emulsions are 11.2 and 5.9, respectively. By relative dielectric permittivity measurements, the required HLB value obtained for oil-in-water emulsions was 10.9 ± 0.4 , in agreement with the results from emulsion stability tests.

KEY WORDS: Dielectric constant; Dielectric permittivity; Emulsions; HLB; Octyldodecanol; Relative required HLB.

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