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(54) Title: SURFACTANTS BASED ON MONOUNSATURATED FATTY ALCOHOL DERIVATIVES

(57) Abstract: Surfactant compositions comprising an alkoxylate, a sulfate, or ether sulfate of a C₁₀-C₁₂ monounsaturated alcohol are disclosed. The alkoxylate, sulfate, or ether sulfate may derive from undecylenic acid or undecylenic alcohol. Compared with their saturated analogs, the monounsaturated alkoxylates, sulfates, and ether sulfates are less irritating, making them valuable for personal care, laundry, cleaners, and other household applications. Microscopy studies show that the alkoxylates, sulfates, and ether sulfates have favorable phase behavior over a wide range of actives levels, expanding opportunities for products with greater compaction. When combined with cationic surfactants, the alkoxylates, sulfates, and ether sulfates exhibit synergy, and they have improved solubility compared with their saturated analogs. The surfactants find value for the personal care, laundry and cleaning, emulsion polymerization, agricultural products, oilfield applications, and specialty foams industries.

