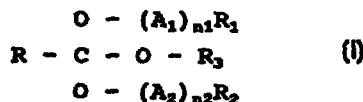




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(54) Title: AN ORTHO ESTER-BASED SURFACTANT, ITS PREPARATION AND USE ✓



(57) Abstract

The present invention relates to a new ortho ester-based surfactant, where the hydrophobic and hydrophilic parts are connected by ortho ester linkages to the molecule. The ortho ester has formula (I), where R is hydrogen or an aliphatic group with 1-7 carbon atoms; R₁ is hydrogen or an alkyl group with 1-5 carbon atoms; A₁ is an alkyleneoxy group with 2-4 carbon atoms, the number of ethyleneoxy groups being at least 50 % of the total number of alkyleneoxy groups; n₁ is a number between 1 and 30; R₂ is an aliphatic group with 5-22 carbon atoms; A₂ is an alkyleneoxy group with 3-4 carbon atoms; n₂ is a number between 0-30, provided that when R₂ is an aliphatic group with 5-6 carbon atoms n₂ is at least 1; R₃ is selected from the group consisting of (A₁)_{n₁}R₁, (A₂)_{n₂}R₂ and an alkyl group with 1-6 carbon atoms, where A₁, n₁, R₁, A₂, n₂ and R₂ have the same meaning as mentioned above, or a di- or polycondensate via any of the free hydroxy groups of the ortho ester. The ortho ester surfactants are stable in alkaline solutions, but are readily hydrolysed in acidic solutions to yield products that are not surface active. They are suitable to be used as emulsifiers or dispersants.