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(54) Title: METHODS FOR CHLORINATING SUCROSE-6-ESTER

(57) Abstract: Methods for chlorinating sucrose-6-esters to produce 1',4,6'-trichlorosucrose-6-esters include providing a reaction mixture in a temperature-controlled vessel at a temperature less than about 65°C, the reaction mixture comprising sucrose-6-ester, a tertiary amide, and a chloroformiminium chloride salt, which forms an O-alkylformiminium chloride adduct with the hydroxyl groups of the sucrose-6-ester. The methods for chlorinating the sucrose-6-ester further include subjecting the chloroformiminium chloride salt, tertiary amide, and sucrose-6-ester reaction mixture to an elevated temperature between about 75°C and 100°C for a period of time sufficient to produce a chlorinated product mixture of chlorinated sucrose-6-ester products consisting essentially of 1',4,6'-trichlorogalacto-sucrose-6-ester.



WO 2007/053604 A3