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(71) Applicant *(for all designated States except US)*: **THE PROCTER & GAMBLE COMPANY** [US/US]; One Procter & Gamble Plaza, Cincinnati, Ohio 45202 (US).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **SCHAEFER, Jared, John** [US/US]; 1242 Garden Circle, Wyoming, Ohio 45215 (US).

(74) Common Representative: **THE PROCTER & GAMBLE COMPANY**; c/o T. David Reed, The Procter & Gamble Company, Winton Hill Business Center, 6110 Center Hill Road, Cincinnati, Ohio 45224 (US).

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(54) Title: PURIFIED, MODERATELY ESTERIFIED POLYOL POLYESTER FATTY ACID COMPOSITIONS AND SYNTHESIS THEREOF

(57) Abstract: Processes for the preparation of a purified moderately esterified polyol fatty acid polyester composition and purified moderately esterified polyol fatty acid polyester compositions derived from such processes. Processes include the steps of: (a) forming an initial reaction mixture, said initial reaction mixture containing: a polyol portion; a highly esterified polyol fatty acid polyester; a solvent; and, a catalyst, wherein the molar ratio of said polyol portion to said highly esterified polyol polyester is chosen such that the final ratio of total fatty acid esters to total polyol backbones is in the range from about 3.2:1 to about 6.4:1; wherein the molar ratio of said catalyst to said highly esterified polyol polyester is in the range of from about 0.01:1 to about 10:1, and wherein the weight ratio of said solvent to the combined weight of said polyol portion, said highly esterified polyol polyester, and said catalyst is in the range of from about 0.01:1 to about 2:1; and (b) forming an initial reaction product by reacting said initial reaction mixture in an inert atmosphere, in the presence of a sufficient amount of agitation, for a period of time in the range of from about 30 minutes to about 6 hours, and at a temperature in the range of from about 80°C to about 140°C.

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