

Title (en)
PROCESS FOR PREPARING CONDENSED DETERGENT GRANULES

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EP 0510746 A3 19930908 (EN)

Application
EP 92200993 A 19920407

Priority
• EP 91870061 A 19910412
• EP 92870038 A 19920310

Abstract (en)
[origin: EP0510746A2] The present invention relates to a process for making a free flowing granular detergent comprising : mixing an effective amount of an aqueous surfactant paste having a detergency activity of at least 40% and an effective amount of a dry detergency powder, said surfactant paste active and builder or powder having a ratio of 0.05:1 to 19:1 to form a mix; rapidly forming a uniform mixture from said mix at a temperature of from about 0 DEG C to about 80 DEG C; granulating said mixture into discrete detergent granules using a high speed mixing at a tip speed of about 5-50 m/sec; and wherein said surfactant paste is comprised of at least one anionic surfactant, and any other surfactants, if present, are selected from the group of anionic, zwitterionic, ampholytic and cationic surfactants and mixtures thereof; and wherein said mixing and granulating are conducted simultaneously, or immediately sequentially. The nil-surfactant components of the finished granular detergent other than the granulated active paste, comprise a (relatively small) part of the total amount of builder, another part of the builder having been used for granulation. The nil active components can be spray-dried to form a powder having good color, frangibility, dissolution properties and desirable density and size characteristics for direct dry mixing with other ingredients of the finished granular detergent.

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Citation (search report)
• [XD] EP 0349201 A2 19900103 - PROCTER & GAMBLE [US]
• [A] EP 0402111 A2 19901212 - PROCTER & GAMBLE [US]
• [A] FR 2568584 A1 19860207 - KAO CORP [JP]
• [AD] CHEMICAL ABSTRACTS, vol. 103, no. 12, September 1985, Columbus, Ohio, US; abstract no. 89343,

Cited by
EP0639638A1; US5733862A; US5665691A; US5554587A; US5663136A; US5565137A; US2014020304A1; US9409279B2; US5990073A; US5691297A; US5707959A; US5489392A; US5516448A; US5583098A; EP0663439A1; US5496487A; US5486303A; EP0618289A1; US6610645B2; WO9634084A1; WO9627655A1; WO9804669A1; WO2015148097A1; WO9506109A1; WO9804670A1; WO9505449A1; WO9523206A1; EP0578872B1

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