

Title (en)  
DETERGENT COMPOSITION

Publication  
**EP 0286075 A3 19900711 (EN)**

Application  
**EP 88105516 A 19880407**

Priority  
US 3663587 A 19870410

Abstract (en)  
[origin: EP0286075A2] Liquid, caustic-free, pre-spotting compositions that remove baked-on food residues from hard surfaces at ambient temperatures are provided which comprise: a. from about 1 to 40%, preferably 4 to 20%, of a surfactant selected from the group consisting of anionic surfactants, nonionic surfactants and mixtures thereof; b. from about 1 to 10% of a builder selected from the group consisting of polyphosphates, pyrophosphates, citrates, carbonates, and mixtures thereof; c. from about 0.2% to 2% of an amine selected from the group consisting of monoethanolamine, diethanolamine, triethanolamine and mixtures thereof; d. water; and e. further comprising from about 3 to 50% of a solvent, which solvent is selected from the groups consisting of: i) sulfolane, propylene glycol monoethyl ether acetate, dipropylene glycol monomethyl ether acetate, ethylene glycol monoethyl ether acetate, diethylene glycol monoethyl ether acetate, diethylene glycol dimethyl ether, ethylene glycol dimethyl ether, diethylene glycol diethyl ether, and mixtures thereof; ii) diethylene glycol monobutyl ether, ethylene glycol monobutyl ether, and N-methyl 2-pyrrolidone and mixtures thereof; and iii) a mixture of two solvents, the first such solvent comprising 5-17% of an acetate selected from the group consisting of ethyl acetate and n-propyl acetate, and the second such solvent comprising 15-34% of a solvent selected from the group consisting of acetone, N-methyl 2-pyrrolidone and methyl ethyl ketone, wherein the ratio of the first solvent to the second solvent may range from 1:4 to 1:2. Additionally, such formulations may include: f. from about 3 to 22% of imidazole; and g. up to 6% of a foam booster, a foam stabilizer, a viscosity adjusting agent, and mixtures thereof. n

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Citation (search report)  
• [X] DE 2300744 A1 19730719 - AMERICAN HOME PROD  
• [A] US 4105574 A 19780808 - CULMONE VINCENT, et al  
• [A] EP 0105063 A1 19840411 - PROCTER & GAMBLE [US]  
• [AD] US 4477288 A 19841016 - KAZMIERCZAK THOMAS F [US], et al  
• [A] US 3856695 A 19741224 - GEISS R, et al  
• [A] BE 665532 A 19651216

Cited by  
CN113774391A; EP0337576A3; AU727789B2; US5783538A; CN1100135C; US5837665A; TR28432A; US5264158A; FR2675662A1; FR2702775A1; US5447723A; GB2230791A; EP3677663A1; WO9600769A1; WO9709412A1; WO9625465A1; WO9531510A3; WO9404646A1; WO9421776A1; WO9306814A1; EP3677664A1; US11118138B2; EP3795665A1; EP3795667A1

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