

# Polymers

Patent S.No	Patent No.	Priority date	Surfactant	Overall Claimed Composition patent	Benefit/Advantage
<b>Polymer</b>					
<b>Polymer and Builder</b>					
24	GB2307694A	11/30/1995	ethoxylated nonionic surfactant and/or an alkylpolyglycoside	(a) an organic surfactant system comprising one or more nonionic surfactants in an amount of at least 15 wt% based on the detergent composition, and optionally or more anionic, cat ionic, amphoteric or zwitterionic surfactants, (b) from 0 to 80 wt% of a builder component comprising one or more inorganic or organic detergency builders, (c) a soil release effective amount of a water-soluble or water-dispersible sulphonated polyester comprising monomer units of (i) an unsulphonated aromatic diacidic monomer (A), (ii) a sulphonated aromatic diacidic monomer (SA), (iii) optionally a hydroxylated aromatic or aliphatic diacidic monomer (HA), in an amount replacing up to 50 mole% of (A) and/or (SA), (iv) a polyol (P) selected from ethylene glycol, propylene glycol, isopropylene glycol, glycerol, 1,2, 4-butanetriol and 1,2,3-butanetriol, and oligomers of these having from 1 to 8 monomer units, the polyester having a sulphur content; (d) optionally other detergent ingredients to 100 wt%.	Improved soil-release properties
25	GB2340500	8/7/1998	alkylbenzene sulphonate and/or primary alcohol sulphate and other surfactants (Wide range is mentioned in general in description)	Surfactant system, builder system, decoupling polymer (deflocculating polymer), sequestrants, reducing bleaches, and photobleaches	Mildness to the skin of the composition is greater than that of compositions without surfactant (d)
26	GB2307693A	11/30/1995	Primary alkyl sulphate and/or alkyl ether sulphate and/or alkylbenzene sulphonate and an ethoxylated nonionic surfactant and/or an alkylpolyglycoside	(a) Organic surfactant system comprising one or more anionic, nonionic, cationic, amphoteric or zwitterionic surfactants, (b) from 5 to 80 wt% of a builder component comprising one or more inorganic or organic detergency builders, (c) a soil release effective amount of a water-soluble or water-dispersible sulphonated polyester comprising monomer units of (i) an unsulphonated aromatic diacidic monomer (A), (ii) a sulphonated aromatic diacidic monomer (SA), (iii) optionally a hydroxylated aromatic or aliphatic di acidic monomer (HA), in an amount replacing up to 50 mole% of (A) and/or (SA), (iv) a polyol (P) selected from ethylene glycol, propylene glycol, isopropylene glycol, glycerol, 1,2, 4-butanetriol and 1,2,3-butanetriol, and oligomers of these having from 1 to 8 monomer units, the polyester having a sulphur content; (e) a bleach system comprising from 5 to 35 wt% (based on the detergent compositions) of sodium percarbonate, (d) optionally other detergent ingredients to 100 wt%.	Improved soil-release properties
27	GB2304726A	9/4/1995	Ethoxylated nonionic surfactant	Soil release polymer and inorganic carrier material (containing granules), detergent-active, detergency builder and polycarboxylate polymer	Composition has optimum balance of liquid carrying capacity and dissolution rate.
<b>Polymer and Other Ingredients</b>					
28	GB2378960A	8/22/2001	Wide range is mentioned in general in description	Fluorocarbon stain- blocking agent having cationic cross-linking polymeric material, detergent active compound, fabric softening and/or conditioning compound and perfume	Improves the surface color definition and stain repellency of a fabric after multiple washing and imparts pill and/or fuzz resistance, also improves oil resistance.
29	GB2304727A	9/11/1995	Non-ionic surfactant	Fabric softening compound and a soil releasing copolymer of polyethylene glycol, terephthalic acid and polyol and non-ionic surfactant	Improved soil-releasing properties and reduces soil redeposition in the following wash
30	GB2441444A	03/22/2005   03/13/2006   03/13/2006	Not specified	Clay mineral carrier material (bentonite clay), mica, water-soluble polymer coating (polymeric alcohol, cellulose), titanium dioxide/iron oxide	Granules have robustness and achieves durability and dispersibility
31	GB2432852A	12/2/2005	Wide range is mentioned in general in description	Perfume, a benefit agent, and a polymer, cationic deposition aid (polysaccharide), surfactant, cosurfactant	Perfume deposition efficiency for longer time

32	GB2432851A	12/2/2005	Wide range is mentioned in general in description	Perfume, a benefit agent, and a polymer, cationic deposition aid (polysaccharide), surfactant, cosurfactant	Protection of the perfume from the action of surfactants during a wash process, and provides a deposition efficiency
33	GB2432850A	12/2/2005	Wide range is mentioned in general in description in description	Perfume, benefit agent, polymer, surfactant, cosurfactant	Protection of the perfume from the action of surfactants during a wash process, and provides a deposition efficiency
34	GB2428043A	7/6/2005	Ionic surfactant (sodium lauryl sulfate) mentioned in description	Polymer, benefit agent/sugar polyester	Ionic surfactant (sodium lauryl sulfate) mentioned in description