

Title (en)

TEREPHTHALIC POLYESTER COMPOSITION AND ITS USE AS SOIL RELEASE AGENT

Title (de)

TEREPHTHALSÄURE-POLYESTERZUSAMMENSETZUNG UND IHRE VERWENDUNG ALS SCHMUTZABWEISENDES MITTEL

Title (fr)

COMPOSITION POLYESTER TEREPHTHALIQUE ET SON UTILISATION COMME AGENT ANTISALISSURE

Publication

**EP 1097190 A1 20010509 (FR)**

Application

**EP 99929469 A 19990709**

Priority

- FR 9901691 W 19990709
- FR 9809042 A 19980715

Abstract (en)

[origin: FR2781233A1] Terephthalic polyester composition comprises PET homooligomer and a sequenced copolymer with PET and polyoxyethylene sequences, useful as soil release agent in laundry detergents. Terephthalic polyester composition (CPT) comprising a mixture of (A) an ethyleneterephthalate homooligomer (PET1) consisting essentially of repeating oxyethylene terephthalate (TE) units of formula (I), and (B) a sequenced terephthalic copolymer (PET2/TE-POE) comprising: (1) at least one polyethylene terephthalate sequence (PET2) consisting of repeating oxyethylene terephthalate units (TE) of formula (I) and (2) at least one polyoxyethylene terephthalate sequence (TE-POE) of formula (II). The composition is such that: (1) the number of units (TE) in (PET1) is no more than 10%, preferably no more than 7 %, of the total number of units (TE) in the polyester composition (CPT); (2) the proportion by weight of total units (TE) present in the composition (CPT) is at least 11 %, preferably 11.5-17 %, of the total weight of the composition (CPT); (3) the proportion by weight of mono(oxyethyleneoxy) units (OEO) of formula (III) is at least 1.3 %, preferably 1.3-2.3 %, of the total weight of the composition (CPT), these residues (OEO) being present in aromatic oxyethylene diester groups (ODA) of formula (IV) present in the total of sequences (PET1) + (PET2); and (4) the weight average molecular weight of the sequenced terephthalic copolymer (PET2/TE-POE) is at least 30000, preferably at least 35000 and especially at least 40000. -C(O)-A- C(O)-O-CH<sub>2</sub>-CH<sub>2</sub>-O- (I) -C(O)-A-C(O)-O-CH<sub>2</sub>-CH<sub>2</sub>-O-(CH<sub>2</sub>-CH<sub>2</sub>-O)n- (II) 1/2O-CH<sub>2</sub>-CH<sub>2</sub>-O1/2 (III) -A-C(O)-O-CH<sub>2</sub>-CH<sub>2</sub>-O-C(O)-A- (IV) A = 1,4-phenylene; n = a value such that the sequence has a mean number average molecular weight of 1500-4000, preferably 3000-4000. Independent claim are also included for the preparation of the composition and detergent formulations comprising the composition.

IPC 1-7

**C11D 3/37; C08G 81/00; C08G 63/672; C08L 67/02**

IPC 8 full level

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CPC (source: EP US)

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C-Set (source: EP US)

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