

Title (en)

Composition for the finishing of fibres.

Title (de)

Zusammensetzung zum Ausrüsten von Fasern.

Title (fr)

Composition pour le finissage de fibres.

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Application

EP 88110686 A 19880705

Priority

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Abstract (en)

[origin: US4880906A] A finishing agent for finishing fibers or fiber products is disclosed. The agent is a mixture of the following components: (a) 34 to 99% by weight of a polymer of the general formula <IMAGE> in which R¹ is a z-hybrid aliphatic alcohol, z=2 to 9, m=20 to 75, n=0 to 10, p=0 to 3, (b) 0 to 55% by weight of a copolymer, obtained by copolymerization of (b1) one mole of a macromonomer of the general formula CH₂CHCH₂O(C₂H₄O)_q(C₃H₆O)_r + TR <IMAGE> in which q=5 to 75, r=0 to 10, s=0 to 3, with (b2) 2 to 12 moles of a vinyl ester of the general formula CH₂=CHOCOR₂, in which R₂ is an alkyl group with 1 to 4 carbon atoms, (b3) 1 to 6 moles of N-vinylpyrrolidone, (b4) 0 to 6 moles of an acrylate or methacrylate ester of the general formula CH₃=CR₃-COOR₄, in which R₃=H or CH₃, R₄ is an alkyl group with 1 to 4 carbon atoms, the quotient of the average molecular weight of the monomer (b1) and the number of moles of the monomers (b2), (b3) and (b4) being 20 to 500 and (c) 1 to 35% by weight of a compound, which is reactive with respect to the oxiran group and brings about the cross linking reaction, the sum of the components (a), (b) and (c) yielding 100% by weight. Especially preferred is a finishing agent mixture of 34 to 73% by weight of component (a) 24 to 55% by weight of component (b) and 2 to 30% by weight of component (c) the sum of components (a), (b) and (c) yielding 100% by weight. The invention also discloses a finishing composition in the form of an aqueous solution comprising 0.1 to 10% by weight of the finishing agent as active ingredient with the remainder being water. A method for fixing fibers and fiber products with the inventive composition is also disclosed. The finishing agent and composition of the invention improve the handle, the hydrophilicity and the soil release of treated textile material. At the same time, the soilability, graying and the tendency to develop electrostatic charges are reduced.

Abstract (de)

Mittel zum Ausrüsten von Fasern oder Faserprodukten in Form einer 0,1 bis 10 Gew.-%igen wäßrigen Lösung eines Gemisches, bestehend aus a) 34 bis 99 Gew.-% eines Polymerisates der allgemeinen Formel <IMAGE> R¹ = z-wertiger aliphatischer Alkohol, z = 2 bis 9, m = 20 bis 75, n = 0 bis 10, p = 0 bis 3, b) 0 bis 55 Gew.-% eines Copolymerisates, erhältlich durch Copolymerisation von b1) einem Mol eines Makromonomeren der allgemeinen Formel <IMAGE> q = 5 bis 75, r = 0 bis 10, s = 0 bis 3, mit b2) 2 bis 12 Mol eines Vinylesters der allgemeinen Formel CH₂=CHOCOR², R² = Alkylrest mit 1 bis 4 Kohlenstoffatomen, b3) 1 bis 6 Mol N-Vinylpyrrolidon, b4) 0 bis 6 Mol eines Acryl- oder Methacrylsäureesters der allgemeinen Formel CH₂=CR³-COOR<4>, R³ = H oder CH₃, R<4> = Alkylrest mit 1 bis 4 Kohlenstoffatomen, wobei der Quotient aus dem durchschnittlichen Molekulargewicht des Monomeren b1) und der Molzahl der Monomeren b2), b3) und b4) 20 bis 500 ist, c) 1 bis 35 Gew.-% einer an sich bekannten, in Bezug auf Oxirangruppen reaktiven, die Vernetzung bewirkenden Verbindung, wobei die Summe der Komponenten a), b) und c) 100 Gew.-% ergibt. Das erfindungsgemäße Mittel verbessert den Griff, die Hydrophilie und die Ablösung von Schmutz von dem behandelten Textilgut. Gleichzeitig wird die Anschmutzbarkeit, die Vergrauung und die elektrostatische Aufladung vermindert.

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