Title (en)

RESIN COMPOSITION FOR INK-JET RECORDING SHEET AND RECORDING SHEET MADE WITH THE SAME

Title (de)

HARZZUSAMMENSETZUNG ZU EINEM TINTENSTRAHLAUFZEICHNUNGSBLATT UND DAMIT HERGESTELLTES AUFZEICHUNGSBLATT

Title (fr)

COMPOSITION DE RESINE DESTINEE A UNE FEUILLE D'ENREGISTREMENT PAR JET D'ENCRE ET FEUILLE REALISEE A L'AIDE DE CETTE COMPOSITION

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Application

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Abstract (en)

The present invention Nos. I-VII are a resin composition for an ink-jet recording sheet for constructing an image-receiving layer which is formed on at least one surface of a base material for an ink-jet recording sheet. The present invention No. I relates to a resin composition for an ink-jet recording sheet which comprises (1) 2-80% by mass of a cationic acrylic copolymer (A) having a crosslinkable group, (2) 5-80% by mass of a saponified product (B) of a vinyl acetate-based copolymer having a polymerization degree of 200-1000, and (3) 0-80% by mass of a modifier (R), the present invention No. II relates to a resin composition for an ink-jet recording sheet which contains (1) 2-80 wt% of a cationic acrylic copolymer (A) having a crosslinkable group, (2) 5-80 wt% of a saponified product (B) of a vinyl acetate-based copolymer, (3) (n1-80) wt% of a water-based polyurethane resin (C), (4) (n2-60) wt% of a polyurethane-based graft polymer mixture (D), and (5) (n3-60) wt% of a polyester-based graft polymer mixture (E) in a solid content-based ratio, and total is 100 wt%, in which there are satisfied conditions that a minimum value in n1, n2, and n3 is 0, and (n1+n2+n3) is ≥5, the present invention No. III relates to a resin composition for an ink-jet recording sheet which comprises, Ä1Ü 2-80% by weight of a cationic acrylic copolymer (A) having a crosslinkable group, Ä2Ü 5-60% by weight of a saponified product (B) of a vinyl acetate-based copolymer, and Ä3Ü 0-80% by weight of a water-based polyurethane resin (C) ätotal of the (A), (B), and (C) is 100% by weightü, and Ä4Ü 0.05-10 parts by weight of a block isocyanate compound (F) based on 100 parts by weight of the saponified product (B) of a vinyl acetate-based copolymer, the present invention No. IV relates to a resin composition for an ink-jet recording sheet which comprises the use of 2-100% by weight of a cationic acrylic copolymer (A) composed of a monomer having an alkylene oxide group, a monomer having a hydrophilic group, a monomer having a crosslinkable group, a monomer containing cationic group, 0-90% by weight of a saponified product (B) of a vinyl acetate-based copolymer, and 5-60% by weight of a modifier (R), and an image-receiving layer is formed over at least one surface, the present invention No. V relates to a resin composition for an ink-jet recording sheet which comprises formulating 70-100% by weight of a cationic (meth)acrylic polymer (A) in which there are copolymerized a cationic (meth)acrylate monomer having a polyalkylene oxide group, a monomer having a hydrophilic group, a monomer having a crosslinkable group, a monomer containing cationic group, and a cationic monomer, 0-30% by weight of a saponified product (B) of a vinyl acetate-based copolymer (total thereof is 100% by weight), and 0-15 parts by weight of a modifier (R) based on 100 parts by weight of the (A) and the (B), the present invention No. VI relates to an ink-jet recording sheet which comprises being constructed by a composition containing a (meth)acrylic-based copolymer having a hydrolyzable silyl group in which a polymerizable unsaturated monomer having a hydrolyzable silyl group is copolymerized with monomers containing a (meth)acrylate-based polymerizable unsaturated monomer, and inorganic compound fine particles, the present invention No. VII relates to a resin composition for an ink-jet recording sheet characterized by containing 100 parts by weight of a resin composition composed of (1) 1-30% by weight of a cellulose derivative (A) and (2) 70-99% by weight of a good solvent (B) for the cellulose derivative (total is 100% by weight), (3) 0.1-20 parts by weight of an organic acid (C) which can dissolve in the good solvent (B) or a weak solvent (D) for the cellulose derivative, and optionally, (4) 0-150 parts by weight of a weak solvent (D) for the cellulose derivative, and relates to a recording sheet in which an image-receiving layer is formed on a body to be recorded composed of the resin composition. the present invention No. VIII is to provide a heat transfer sheet which is excellent in an ink-absorbing ability, an ink-fixing ability, and a printing ability in the case of molding into the heat transfer sheet, and which is high in a water resistance, durability, particularly, micro cracks resistance of a recorded picture, and in which an ink-receiving layer is formed on an elastic material, and micro cracks are not caused even though the recorded picture is expanded and shrunk, and a resin composition for constructing thereof, a resin composition containing a polymer (A) containing a monomer unit shown by a specified formula (1) and a hot-melt adhesive resin (B), a heat transfer sheet comprised the resin composition, and a method for the preparation thereof.

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