

Title (en)

NAPHTHALENE CATIONIC COUPLER FOR OXIDATION DYEING OF KERATIN FIBER

Title (de)

NAPHTHALEN ENTHALTENDE KATIONISCHE KUPPLER ZUM OXIDATIVEN FÄRBEN KERATINISCHER FASERN

Title (fr)

COUPLEUR NAPHTALENIQUE CATIONIQUE POUR LA TEINTURE D'OXYDATION DE FIBRES KERATINIQUES

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Application

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Abstract (en)

[origin: FR2788690A1] Naphthalene cationic couplers are new. Patent refers to oxidation-dyeing composition(s) A, containing (in dye-appropriate medium) at least one oxidation-base, and at least one coupler selected from compounds of formula (I) (and their acid-addition salts). R1, R2 and R3 = H, halogen, Z, 1-6C alkyl radical, (1-6C)alkyl carbonyl-, amino(1-6C)alkyl carbonyl-, N-Z-amino-(1-6C) alkylcarbonyl-, N-(1-6C)alkyl-amino-(1-6C) alkylcarbonyl-, or N,N-di(1-6C)alkyl-amino-(1-6C) alkylcarbonyl- radicals, or amino-(1-6C)-alkyl-carbonyl-, N-Z-amino-(1-6C) alkylcarbonyl-, N-(1-6C)alkyl-amino-(1-6C) alkylcarbonyl-, or N,N-di(1-6C)alkyl-amino-(1-6C) alkylcarbonyl- (1-6C) alkyl radicals, or carboxy-, (1-6C)alkyl carboxy-, (1-6C)alkyl sulfonyl-, aminosulfonyl-, N-Z aminosulfonyl-, etc.; R4 = 1-6C alkyl radical, Z, aryl (or benzyl) radical, trifluoro-, mono(or poly)- hydroxy-, (1-6C)-alkoxy-, cyano-, carbamyl-, N-(or N,N) (1-6C)-(di) alkylcarbamyl-, thiocarbamyl-, sulfo-, (1-6C)-alkyl-carboxy-, (1-6C) alkyl carbonyl-, (1-6C)alkyl sulfinyl-, aminosulfonyl-, N-Z-aminosulfonyl-, N-(1-6C)alkyl-aminosulfonyl-, N,N-di(1-6C)alkyl-aminosulfonyl-, aminosulfonyl-, and amino- (1-6C)alkyl radicals; etc. Z = unsaturated cationic groups of formula (II), (III) or saturated cationic groups of formula (IV); D = (preferably 1-14C) linear or branched chain, which may be interrupted with one or more heteroatoms (N, O or S) and substituted with one or more hydroxyl or 1-6C alkoxy radicals, and may have one or more ketone groups; E,G, J, L and M = C, O, S or N; n = 0-4; m = 0-5; R = second group Z identical or different to first, halogen atom, hydroxyl radical, (1-6C) alkyl-, mono (or poly) hydroxy-, or cyano- (1-6C)alkyl radicals, nitro-, cyano-, 1-6C alkoxy-, tri(1-6C) silane (1-6C) alkyl-, amido-, aldehydo-, carboxyl-, thio-, (1-6C) alkyl carbonyl-, thio-(1-6C) alkyl-, (1-6C)alkyl-thio- and amino-radicals, with amino- radical protected with (1-6C)alkyl carbonyl- (or carbamyl, or sulfonyl) radicals, or groups NHR'' or NR''R'''; R'', R''' = identical or different (1-6C) alkyl radical, monohydroxy (1-6C) alkyl- or polyhydroxy (2-6C) alkyl- radical; R5 = (1-6C) alkyl radical, monohydroxy (1-6C) alkyl- or polyhydroxy (2-6C) alkyl- radical, benzyl radical, cyano-, tri(1-6C)alkyl silane-, (1-6C) alkoxy or (1-6C) alkyl carboxy- (1-6C) alkyl radical; or second Z group identical or different from first; R6, R7 and R8 = (1-6C) alkyl radical, monohydroxy (1-6C) alkyl- or polyhydroxy (2-6C) alkyl- radical, (1-6C) alkoxy-, cyano-, amido- or tri(1-6C)alkyl silane- (1-6C) alkyl radical, or amino-(1-6C)alkyl radical with amine protected by (1-6C) alkyl sulfonyl- or carbonyl- radical, or two of R6-R8 radicals may form with N atom 1-6C saturated cycle which may contain one or more hetero-atoms and may be substituted with halogen, hydroxyl radical, (1-6C) alkyl radical, monohydroxy (1-6C) alkyl- or polyhydroxy (2-6C) alkyl- radical, 1-6C alkyl-thio- or alkoxy-, nitro-, cyano-, amido-, aldehydo-, carboxyl- or thio- radical, or cyano-, keto-, thio-, or tri-(1-6C)alkyl silane- (1-6C)alkyl radical, or amine radical, protected with (1-6C)alkyl carbonyl- (or sulfonyl) radical, or one of R6-R8 may represent second Z group identical or different from the first; R9 = (1-6C) alkyl radical, monohydroxy (1-6C) alkyl- or polyhydroxy (2-6C) alkyl- radical, aryl or benzyl radical, amino-(1-6C) alkyl radical with amine optionally protected with (1-6C)alkyl carbonyl- (or sulfonyl)- radical; or carboxy-, cyano-, carbamyl-, trifluoro-, tri(1-6C)alkyl silane-, sulfonamido-, (1-6C) alkyl carboxy-, (1-6C)alkyl sulfinyl- (or sulfonyl-, or keto-), or N-(1-6C)alkyl carbamyl- (or sulfonamido-) (1-6C) alkyl radical; X = monovalent or divalent anion; a and y = 0-1. Independent claims are included for: (1) a process of dyeing keratin fibres (especially hair) comprising application of composition A, which produces color at acidic, neutral or alkaline pH with the aid of oxidant-agent added at the application stage or present in oxidant composition B applied simultaneously or in sequence, separately from composition A; (2) a dyeing kit comprising separate compartments of which the first contains dyeing composition A and the second contains oxidant composition B; and (3) a compound of formula (I') (and its acid-addition salts), exclusive of 6-hydroxy- N,N,N-trimethyl- 1-naphthalene methanaminium chloride and ((2-hydroxy-1-naphthyl) methyl) trimethyl ammonium iodide; and 4) the use of compounds (I') as coupler for oxidation-dyeing of keratinic fibres. R1'-R3' = R1-R3 as in (I); when two of R1'-R3' are simultaneously H, the third radical contains amido- or carboxy group, however those groups are not directly joined to naphthol cycle.

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