

Title (en)

SOL-GEL COATING FOR SINGLE-LAYER OR MULTI-LAYER VARNISHES

Title (de)

SOL-GEL-ÜBERZUG FÜR EINSCHICHTIGE ODER MEHRSCHICHTIGE LACKIERUNGEN

Title (fr)

REVETEMENT SOL-GEL POUR PEINTURE MONOCOUCHE OU MULTICOUCHES

Publication

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Application

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Abstract (en)

[origin: DE19909894A1] The invention relates to a sol-gel coating material containing (A) an acrylate copolymer solution containing at least one acrylate copolymer (A1); (B) a parent varnish which can be prepared by hydrolysis and condensation of at least one hydrolysable silane (B1) of the general formula (I) SiR₄, in which the variable R = hydrolysable groups, hydroxy groups and non-hydrolysable groups, provided that there should be at least one, preferably two, hydrolysable groups; and (C) an additive solution containing c1) at least one ethylenically unsaturated compound containing at least one epoxide group; c2) at least one silane (B1) with at least one non-hydrolysable group R presenting at least one epoxide group; and c3) at least one adduct of at least one silane (B1) with at least one non-hydrolysable group R presenting at least one amino group and at least one cyclic ethylenically unsaturated dicarboxylic acid anhydride. The invention also relates to the use of said sol-gel coating material for producing scratchproof sol-gel coatings.

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