

Title (en)
BINDING AGENTS HAVING BARRIER PROPERTIES

Title (de)
BINDEMITTEL MIT BARRIERE-EIGENSCHAFTEN

Title (fr)
LIANT A PROPRIETES BARRIERE

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Application
EP 04765281 A 20040916

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Abstract (en)
[origin: WO2005033240A1] The invention relates to binding agents having barrier properties, containing: a) a compound having at least one NCO group and at least one reactive functional group, which can be cured by radiation and which serves as component (A), and; b) a silicon-organic compound serving as component (B) with at least one NCO group and at least one functional group of formula (I): $-\text{Si}(\text{X})_3-\text{n}$, in which X represents $-\text{NH}_2$; $-\text{NH}-\text{CO}-\text{R}$; $-\text{OOC}-\text{R}$; $-\text{O}-\text{N}=\text{C}(\text{R})_2$ or OR' ; R represents a linear or branched, saturated or unsaturated C1-C18 alkyl radical, preferably a methyl, ethyl, propyl or isopropyl radical; R' represents R, preferably a methyl, ethyl, propyl or isopropyl radical or an oxyalkylene radical having up to 4 C atoms, preferably $-(\text{C}_2\text{H}_4-\text{O})_m-\text{H}$ and/or $(\text{CH}_2-\text{CH}(\text{CH}_3)-\text{O})_m-\text{H}$, a C5-C8 cycloalkyl radical; a C6-C10 aryl radical or a C7-C12 aralkyl radical; m equals 1 to 40, preferably 1 to 20, particularly preferred 1 to 10; n equals 0, 1 or 2. The binding agent is used as a radiation curable binding agent in coating agents, fillers, sealants or adhesives. The invention also relates to a method for producing laminated films having barrier properties with regard to CO_2 , O_2 , N_2 , water vapor and flavoring agents while using the inventive binding agent, and to the laminated films produced according to said method.

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