

Title (en)
SELF-RELEASING BINDER SYSTEM FOR COMPOSITE PRODUCTS

Title (de)
SELBSTTRENNENDES BINDEMITTELSYSTEM FÜR VERBUNDWERKSTOFFE

Title (fr)
SYSTEME DE LIANTS A AUTODECOLLEMENT POUR PRODUITS COMPOSITES

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Application
EP 95924769 A 19950630

Priority

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Abstract (en)

[origin: WO9601293A1] A composition is disclosed for a self-releasing binder composition useful for preparing a composite article prepared by contacting at least (1) a polyisocyanate compound, (2) a compound of one of formulae (I), (II), (III) in an amount from about 1 to about 20 parts per 100 parts by weight of the polyisocyanate compound, wherein X is oxygen or sulfur, R is hydrocarbyl or hydrocarbyl containing an ether or ester group, and may be cyclic, and R' is R, H, or an acyl, carbamoyl, phosphoryl or sulfonyl group; and (3) a polyether containing compound, with the following provisos: (i) wherein the polyether containing compound contains no active hydrogen, the polyether containing compound is present in an amount from about 1 to about 2000 parts per 100 parts by weight of the polyisocyanate; and (ii) wherein the polyether containing compound contains at least one active hydrogen, the polyether containing compound is present in an amount such that, for compounds of formula (I) the OH:NCO equivalency ratio is less than about 0.77:1.00; for compounds of formula (II), the OH:NCO equivalency ratio is less than about 0.25:1.00; and for compounds of formula (III), the OH:NCO equivalency ratio is less than about 0.10:1.00; under reaction conditions sufficient to form a binder composition. The components which make up the self-releasing binder composition can be applied to substrate particles, which may be, for example, cellulosic, polymeric, inorganic, or similar particles, or combinations thereof. This composition provides excellent adhesion of the particles while at the same time offering easy and dependable releasability from a wide variety of metal surfaces.

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