

Title (en)
FLAME-RETARDANT MIXTURE FOR LIGNOCELLULOSE COMPOSITES

Title (de)
FLAMMSCHUTZMISCHUNG FÜR LIGNOCELLULOSISCHE VERBUNDSTOFFE

Title (fr)
MELANGE IGNIFUGE POUR DES COMPOSITES LIGNOCELLULOSIQUES

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Application
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Abstract (en)
[origin: WO2005061625A1] The invention relates to a flame-retardant mixture for lignocellulose composites comprising 60 to 90 percent by weight of particulate and/or fibrous lignocellulose materials and 40 to 10 percent by weight of a flame retardant concentrate that is immobilized on and/or in the particulate and/or fibrous lignocellulose materials acting as carriers. Said flame retardant concentrate contains flame retardants of the boric acid type and/or the salts thereof, melamine resins, optional synergists, and other additives. The flame retardants are chemically coupled to the melamine resins while the flame retardant concentrates are immobilized on and/or in the carrier substance of the particulate and/or fibrous lignocellulose materials. The flame retardant mixture can be produced using a liquid impregnation method, a melt impregnation method, and a liquid impregnation-solid mixing method. Flame-resistant lignocellulose composites can be produced by melt-processing mixtures comprising 40 to 95 percent by weight of flame retardant and 60 to 5 percent by weight of duromer prepolymers, the duromers being hardened. As flame-resistant semifinished products and molding materials, the inventive lignocellulose composites provide great resistance against infestations by insects, fungi, and mold while the flame-retardant mixture is provided with great resistance against washing out. Preferably, said lignocellulose composites are suitable for exterior applications in the construction and leisure sector.

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