ABSTRACT

IMPREGNATION PROCESS FOR A FIBROUS SUBSTRATE, A LIQUID (METH) ACRYLIC SYRUP FOR THE IMPREGNATION PROCESS, ITS METHOD OF POLYMERIZATION AND STRUCTURED ARTICLE OBTAINED THEREOF

The present invention relates to an impregnation process for a fibrous substrate, a liquid composition for implementing this process and the obtained impregnated fibrous substrate. The impregnated fibrous substrate is suitable for manufacturing mechanical or structured parts or articles. In particular the present invention deals with an industrial process for impregnating a fibrous substrate or long fibers with a viscous liquid composition containing mainly methacrylic or acrylic components. This viscous composition is called hereafter liquid (meth) acrylic syrup. The invention concerns also a fibrous substrate pre-impregnated with said syrup which is useful for manufacturing mechanical or structured parts or articles. More particular the impregnation of fibrous substrate with the (meth) acrylic syrup is achieved in a closed mould. The present invention concerns also manufacturing process for manufacturing mechanical or structured parts or articles and three- dimensional mechanical or structured parts obtained by this process.