NEW COMPOSITES FROM SOLID WASTE

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Abstract

The waste recycling done in order to obtain composite products with performant properties and also, with long life cycle is the main purpose for the sustainable development. The present paper describes the way in which, different kind of solid wastes are immobilised in an organic resin as a binder matrix. Composites with different proportion of waste as, rubber/plastic, glass and silica sand have been obtained. The physical-mechanical properties and chemical stability of such organic-mineral composite are very good. Thus, almost all composites present high hardness and good strengths at abrasion and the compressive strengths are above 75 MPa. They also have good thermal stability at high temperature variation.

Key words: mineral solid wastes, organic-mineral composite, organic waste, recycling

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