Analysis of the Reaction to the Fire of a Composite Material the Base of Scrapes of Tires and Latex for Thermal Isolation in Vehicles

Authors : Elmo Thiao Lins Cöuras Ford, Valentina Alessandra Carvalho do Vale, R. M. Nascimento, J. U. L. Mendes **Abstract :** Now the great majority of the applications of thermal isolation in the strip of drops and averages temperatures (up to 200°C), it is made being used from aggressive materials to the nature such an as: glass wool, rock wool, polystyrene, EPS among others. Such materials, in spite of the effectiveness in the retention of the flow of heat, possess considerable cost and when discarded they are long years to be to decompose. In that context, trying to adapt the world politics the about of the preservation of the environment, a study began with intention of developing a material composite, with properties of thermal, originating from insulating industrial residues. In this research, the behavior of the composite was analyzed, as submitted the fire. For this, the reaction rehearsals were accomplished to the fire for the composites 2:1; 1:1; 1:2 and for the latex, based in the "con" experiment in agreement with the norm ASTM-E 1334-90. As consequence, in function of the answers of the system,

was possible to observe to the acting of each mixture proportion.

Keywords : composite, Latex, reacion to the fire, thermal isolation

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