Action to unlock commercial fibre potential

Multi-stakeholder consultation in conjunction with the joint meeting of the intergovernmental group on hard fibres and the intergovernmental group on jute, kenaf and allied fibres

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ABSTRACT

POLYPROPYLEME COMPOSITE REINFORCED WITH SISAL FIBERS TO BE USE IN THE AUTOMOTIVE INDUSTRY

Reinforced with sisal fibers, polypropylene (PP - Sisal) is a compound developed to be applied in the injection process of plastic automotive parts. Polypropylene compounds reinforced with mineral fillers (talc) or fiber glass have been widely applied in this segment. However, natural fibers are an important alternative considering the following aspects: sustainability, recyclability, abundant availability and low cost, if compared with fiber glass and mineral fillers. This work chose sisal as reinforcement in function of the results achieved in the tests of traction, impact, homogeneity and scratch resistance. Besides that, no sharp is formed when broken and specific weight is light in the final part. We conducted try-outs and test to compare the performance of the new composition with that of current ones, and results have shown that the PP - sisal presents better rigidity and greater resistance than its competitors, still counting with natural and ecological appeal. Another very important aspect in this study was the use of recycled polypropylene, which made final results more ecological and profitable.