

Polymer Rubber Composites (PRC) Upcycling of Waste Materials: Thermosets to Thermoplastics

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Polymer Rubber Composites is a new class of thermoplastic material consisting of a high level of ground tire rubber (>65 wt%) from the recycled material source and a latex polymer. The aqueous processing technology is environmental friendly and does not involve in the devulcanization of rubber. PRC can be processed into final articles by conventional plastic thermo processing methods such as extrusion or injection molding.

PRC comprises of a ground tire rubber dispersed phase and a polymer continuous phase. Many key properties of PRC derive from the acrylic polymer, allowing a broad design space for various applications.

