THERMOPLASTIC MAKING FROM CHIPBOARD WASTE

by

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Thermoplastic composite was produced using chipboard waste that consisting melamine paper in combination with Polypropylene (PP) and Maleated Anhydride Polypropylene (MAPP). The various ratios of filler loading of chipboard waste to PP are 10:90, 30:70 and 30:50. The same ratio of filler loading also to combine with MAPP. The PP, MAPP and filler loading of chipboard waste were blended in Dispersion mixer at 190°C about 30 minutes. The mixtures were crushed in a crushing mixer and moulded into composite board. It was tested for mechanical and physical properties according to BS 2782 standards. The result show that the mechanical properties of FMOR, TMOR and Elongation at Break decrease significantly with higher filler loading. The chipboard waste is suitable as a filler in making thermoplastic composite.