# Decrosslinking reaction of silane crosslinked polyethylene in supercritical fluids

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In recent decades, the recycling technology for thermosetting polymers has been highlighted. many researchers have reported that supercritical fluids can be promising solution for regeneration of polymer wastes. In this study, decrosslinking reaction of silane crosslinked polyethylene (SXLPE) in supercritical fluids was investigated. The experiments for decrosslinking of SXLPE were carried out in batch reactor system with several parameters like reaction time, reaction temperature, weight ratio of solvent to polymer and kind of solvents. Thermal and structual analysis were performed with FT-IR, DSC, GPC, C-NMR. The processed SXLPE was decrosslinked completely in supercritical condition and its general properties were silmilar with raw SXLPE.