Recycling of Phenol Resin using Supercritical Fluids

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In general, phenol resin wastes are simply buried or burned, here have been several ways to treat the phenol resin wastes such as landfill, incineration, material recycling and the utilization of energy from combustion, the development of new recycling technology to phenol resin is much needed to prevent environmental pollution development of new recycling, and researches on its recycling method has been actively under way.

We investigated the recycling method to phenol resin by using supercritical fluid. It was possible in this article to remould by phenol resin using supercritical methanol after pellet phenol resin use into 3-5mm, and its analysis was measured by using FT-IR, WAXS, TGA and SEM. reaction using supercritical methanol is much influenced by reaction temperature, the recycling on the waste phenol resin from our previous study which are generally known not to recycling them.