

## 廃FRP由来ガラス繊維を原料としたミルドファイバーの基本的特性

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Basic Characteristic of Milled Fiber made from waste FRP-derived glass fibers

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This study clearly introduces the basic characteristics of milled fiber made from waste FRP-derived glass fibers through depolymerization of unsaturated polyester under ambient pressures. It was found that the waste FRP-derived glass fibers were 25 mm in length with a cotton-like texture. The ratio of aim range (100-300  $\mu\text{m}$ ) of the milled fiber was provided by two phases of the processes that changed the distance of the grinder was higher than that of the existing article. Milled fiber made from waste FRP-derived glass fiber maintained resin and calcium carbonate, however the fiber of the existing article did not have resin and calcium carbonate. It was found that the degree of crystalline of the composite material made from waste FRP-derived glass fiber and post-consumer PET (polyethylene terephthalate) bottle was at the same level as the material existing article and post-consumer PET bottle and only PET bottle. Moreover, the sample which compounded showed strength of 1.5 times of the no composition and the tensile strength of the plastic which compounded with the milled fiber from waste FRP-derived glass fibers was higher than that of the existing article.

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