

Characteristics of stabilized henequen fiber

한지평, 유승곤*
충남대학교 화학공학과
(skryu@cnu.ac.kr*)

Henequen fiber from *Agave fourcydes* is composed of 60%, cellulose 25%, hemicelluloses 8%, lignin and others. Henequen fiber has high tensile strength, low elongation, wear resistance, corrosion resistance properties. The purpose of this study is stabilization of henequen fiber to obtain carbon fiber and activated CF(ACF). In this study, henequen fiber was stabilized by hot air in oxidation furnace at temperature (200~400°C) and time (0~120min). Characterization of stabilized henequen fibers were carried out by means of TGA, elemental analysis and TGA, FT-IR, SEM, BET. Stabilization yields were 30 ~50 wt%. Stabilized henequen can be used as precursor of carbon fiber and activated fiber.