

Pore Structure Characteristics of Filtration Media Containing Electro Spun Fibers

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Abstract

Many novel filtration media are currently being developed for improved performance. One technique involves incorporation of fine electro spun fibers. Various methods of incorporating the fibers are being investigated. However, the pore structures of such filtration media are normally very complex. In this investigation use of capillary flow porometry for determination of pore structure characteristics of one such complex filtration medium has been investigated. In this technique, gas flow rates through the dry sample and through the sample wetted with a wetting liquid are measured as a function of differential pressure. The flow rates through radial and thickness directions are also measurable. The results obtained with successfully investigated samples have been presented and critically examined.