

## Comparison of smoke density from passenger train materials under flame and non-flame conditions

유문천, 권태순\*, 정우성, 권성태  
한국철도기술연구원  
(klez@nate.com\*)

To prevent the fire in the railway vehicle, the materials for car body and its constituents are strictly regulated by Railway Safety Act. Currently, various materials are used for passenger train. According to manufacture time, vehicle model and etc., the chemical composition of materials made for the same purpose is different. Thus, the combustive characteristics also changed. In this study, smoke density, one of regulation items, was measured with various materials used in the same position. The experiments were conducted under flame and non-flame conditions in accordance with ASTM E662.