

## **Evaluation of Degradation on Plastic Glass used in Rolling Stock by Color Measurement**

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Polycarbonate (PC) is mainly used as plastic glass in the industrial field. PC has many advantages for light weight and high impact strength as compared to inorganic glass. However, the long term stability of PC through the service life has not been fully examined. The authors analyzed the degradation behavior of PC glass through long term artificial weathering condition. The PC glass became yellowish through artificial weathering; however, the mechanical strengths, for example the flexural strength and the impact strength, were sufficient for its use as actual window glass of public transportation. Moreover, improved PC is expected to have a longer service life as compared to ordinary PC. In addition, the evaluation of the degradation of the PC based plastic glasses was studied with use of color measurement.