

Test method for exposing polyolefins outdoors combining natural weathering and artificial irradiation

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요 약

The performance of polyolefin plastics and products exposed outdoors is reduced by various environmental factors such as UV radiation, heat, humidity, acid rain, etc. Therefore, the estimation of the lifetime is an important consideration in designing against performance degradation of materials and products for the outdoor use. Although the outdoor exposure test method provides degradation caused by the actual environmental factors, it carries a disadvantage of requiring a prolonged testing period. Outdoor weathering supported with artificial are also available. In all case, these methods are often not effective in regions with a low amount of direct radiation. That is, a paper to be developed which comprise the advantage of outdoor exposure that would generate actual environmental exposure and the advantage of shortening the exposure time by utilizing the artificial irradiation. This test method is developed to provided outdoor weathering supported with artificial irradiation by continuously and sequentially exposing specimens to natural weathering during daytime and artificial radiation ant night time