



# Polymer Durability Analysis

## ACCELERATED WEATHERING IN UV CHAMBER

### KEY WORDS

UV AGING,  
DURABILITY ,  
ASTM G154

### DESCRIPTION

The resistance of polymeric materials to degradation caused by sunlight and humidity is evaluated by simulating accelerated weathering conditions. Samples are subjected to controlled cycles of UV radiation and condensation in an aging chamber, according to ASTM G154. This test is critical for predicting a product's lifespan, evaluating changes in its properties (such as color, gloss, and mechanical strength), and selecting materials for outdoor applications.

### AVAILABLE TECHNIQUES AND/OR EQUIPMENT

- Accelerated aging chamber

### APPLICATIONS

- Coatings, paints and varnishes
- Plastics for outdoor use (profiles, furniture)
- Automotive components (bumpers, headlights)
- Textiles and membranes for outdoor use
- Printing and signage inks
- Sealants and adhesives

### CONTACT US

[labiq\\_fiqbog@unal.edu.co](mailto:labiq_fiqbog@unal.edu.co)

[Universidad Nacional de Colombia](#)