

ISO/TS 21488:2020 (E)

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

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Principle
5	Apparatus
5.1	General
5.2	Test chamber
5.3	Artificial radiation source
5.3.1	General
5.3.2	Metal halide lamp
5.3.3	Fluorescent UVA-340 lamp
5.4	Radiometer
5.5	Black-standard/black-panel thermometer
5.6	Specimen holder
5.7	Apparatus to assess changes in properties
6	Test specimens
7	Test conditions
7.1	Radiation
7.2	Relative humidity of air inside the chamber
7.3	Temperature
7.3.1	Black-standard and black-panel temperature (BPT)
7.3.2	White-standard and white-panel temperature (WPT)
7.3.3	Specimen temperature
7.3.4	Air temperature (AT)
7.4	Time setting of sunrise and sunset
7.5	Exposure conditions
8	Procedure
8.1	General
8.2	Conditioning
8.3	Mounting of test specimen
8.4	Exposure
8.5	Radiant exposure measurement
9	Test report
Annex A	(informative) Outdoor weathering supported with artificial radiation at Seosan
A.1	Seosan outdoor exposure site
A.2	Comparison of outdoor weathering supported with artificial radiation and natural weathering (open rack)
A.3	Results from natural outdoor weathering and outdoor weathering supported with artificial radiation (Metal halide lamp) — Material: Polystyrene
A.4	Test results of outdoor weathering supported with artificial radiation of PE and PP
Annex B	(informative) Apparatus for outdoor weathering supported with artificial radiation