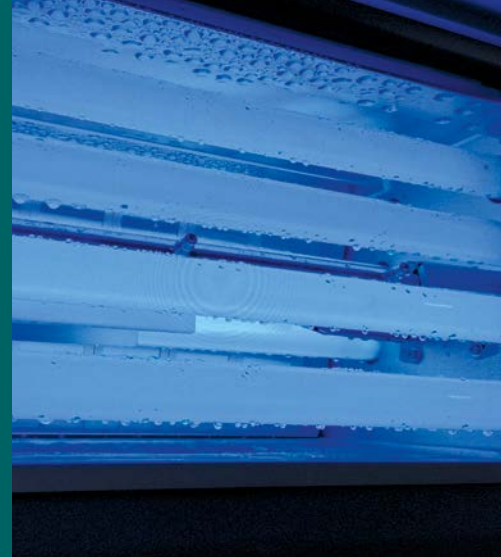


ARTIFICIAL AGEING BY COMBINED EXPOSURE TO RADIATION, HUMIDITY AND TEMPERATURE



Measurement	Change of material and component properties, e.g. strength, hardness, embrittlement, chalking, fading, transmittance, emissivity, yellowing, geometry
Standards	DIN EN 927-6, DIN EN 1297, DIN EN 1898, DIN EN 12224, DIN EN 12543-4, DIN EN 13523-10, DIN EN 75220, DIN EN ISO 4892-1, DIN EN ISO 4892-2, DIN EN ISO 4892-3, DIN EN ISO 11507, DIN EN ISO 11895, DIN EN ISO 11997-2, ASTM D 3424, ASTM D 4329, ASTM D 4587, ASTM D 4799, ASTM D 5071, ASTM D 5208, ASTM D 6695, ASTM G 151, ASTM G 154, ASTM G 155, SAE J 2020, prEN 1062-4
Measurement object	Organic glasses, films, coatings, paints, plastics, gaskets, sealants, roof linings, bitumen and elastomer roofing sheets, vehicle and façade components

TECHNICAL DATA OF INDIVIDUAL SPECTRAL RANGES

UV-A (fluorescent tubes)	Spectral range	300 to 400 nm, max. 340 nm
	Irradiation	0.35 to 1.65 W/m ² at +35 to +80 °C
	Humidity (cyclic)	condensing or spraying
	Sample size	76 × 152 mm (48 pieces) to 488 × 311 × 25 mm (4 pieces)
Solar, Device A (Xenon lamps)	Spectral range	300 to 800 nm
	Irradiation	250 to 765 W/m ² at +35 to +100 °C
	Humidity	cyclic underwater storage
	Max. sample size	190 × 280 mm
Solar, Device B (metal halide lamps)	Spectral range	280 to 3000 nm
	Irradiation	800 to 1200 W/m ² at -40 to +120 °C
	Humidity	rel. humidity 20 to 80 %
	Max. sample size	900 × 1500 mm, height by arrangement

SPECIAL FEATURES

Reduced testing periods	By reducing or omitting dark phases and consistently high irradiances typical load durations are 1 to 8 weeks. The testing periods are thus shorter than in outdoor exposure.
Reproducibility	Reduced number of variables, therefore, they can be better monitored. Artificial ageing is more reproducible than natural weathering. Thus, comparisons between different products are easier possible.
Calibration	Yes. Traceable reference standards are available.

CONTACT

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