

Optium Museum acrylic - Oddy testing

TECHNICAL SHEET

Oddy Testing:

The 'Oddy Test' is an accelerated ageing test developed by conservation scientist Andrew Oddy at the British Museum in 1973. This test is used to determine if the sample material will degrade by **off-gassing** compounds harmful to artworks in the museum environment. Oddy testing determines if a material is safe to use in a museum collection for permanent or temporary use.

Oddy Test	Passed	
Accelerated Aging Q-sun Xenon Arc test	Anti-reflective, anti-static, UV protection and light transmission remain unchanged after 2000 hours (estimated to be approximately 100 years of exposure in indoor environment) of Q-sun Xenon arc testing at exposure intensity of 100,000 Lux.	
Humidity Resistance MIL-C-48497A, para 4.5.3.2	No deterioration of coating after 48 hours @ 50°C (122°F), 95% RH	NA
Corrosion Resistance (Salt Fog) ASTM B117 & B-368-03 & B368-97	48 hr. No Deterioration 50°C (122°F), 95% RH After exposure for 7 – 24 hr cycles (168 hours), the coating shows no damage – Passed	NA
RoHS compliance testing	(Dangerous substance testing: presence of Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent chromium (Hex-Cr)) – Passed	NA
Photographic Activity Test ISO 18916 & ISO 18902	ISO 18916 Silver Image Interaction • Gelatin Staining • Mottling of Image • Interaction Detector Overall performance – Passed ISO 18902 Overall performance – Meet; "Photo-safe" per ISO 18902 section 3.9	
Coating Adhesion (Snap Tape) MIL-C-48497A, para 4.5.3.1	The coating shows no damage after snap removal of tape.	NA
Solubility MIL-C-48497A	After a 24-hour immersion or exposure at room temperature (60°-90°F; 16°-32°C), the anti-reflection coating shows no deterioration in the following solutions: • Distilled Water • Saline Solution (170gm of NaCl per 3.8 liters of water) • Acetone • Ethyl Alcohol • Isopropyl Alcohol • Coffee • Coke	NA

