

HZO Sentinel Plus™ Material Properties



Environmental Properties	HZO Sentinel Plus	Test Specification
Operating Temperature Range (°C)	-55 to +125	Water Contact Angle (WCA) is preserved.
Flammability	Pass - [V0]	UL94
Decomposition Temperature (°C)	> 300	TGA (10% wt loss in air)
Surface Insulation Resistance (Ω)	4.8×10^{13}	IPC TM-650 2.6.3.5
Moisture and Insulation Resistance (Ω)	3.5×10^{11}	IPC TM-650 2.6.3.4A

Chemical Properties	HZO Sentinel Plus	Test Specification
Hydrophobicity / Water Contact Angle	95°	ASTM D7334-08
Fluorescence	No	Visual under UV black light
PFOS / PFOA Compliant	Pass - None Detected	US EPA 3550C:2007
Fungus Resistance	Pass - No Growth	ASTM G21
Chemical Resistance	Pass	Isopropyl Alcohol Immersion
	Pass (No corrosion through coating)	Class IIIa - Mixed Flowing Gas [SO ₂ , NO ₂ , H ₂ S, Cl ₂]

Optical Properties	HZO Sentinel Plus	Test Specification
Transparency - Visible Light	Pass	IPC CC-830B 3.5.2

Physical Properties	HZO Sentinel Plus	Test Specification
Appearance	Pass (Smooth, defect free)	IPC CC-8308 3.5.2
Flexibility	Pass	IPC TM-650 2.4.5.1

Electrical Properties	HZO Sentinel Plus	Test Specification
Dielectric Constant (1 MHz)	2.15	ASTM D150-98
Dissipation Factor (loss tangent) (1 MHz)	0.017	ASTM D150-98