



## Technical Data

## CDM 68.910

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### General Description

CDM ESD 68.910 is a composite material made of glass mat, combined with a high mechanical resistance resin system. Static and ESD (electrostatic discharge) damage electronic components & circuits. CDM ESD will allow charges to be dissipated slowly from the components & circuits allowing quality of your product. CDM ESD has guaranteed dissipative characteristics. CDM ESD exhibits high mechanical & resistance properties. The random glass mat substrate present in the material minimizes delamination problems during machining and pallet & fixture use. The relative low thermal conductivity in the material allows quick pallet & fixture turnaround.

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### Description

Flux resistance is dependant on composition and pH level. CDM ESD has been developed to have a better resistance to chemicals. To prolong the stability of pallets & fixtures regular cleaning should take place. Due to the high glass content of the material, carbide or diamond tip cutters are recommended.

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Properties	-	Excellent performance at temperatures higher than 300° C
	-	Low deformation.
	-	Excellent dimensional stability.
	-	Dissipative material with guaranteed values.
	-	Surface Resistivity 10E <sup>5</sup> to 10E <sup>9</sup> Ω/square
	-	Zero Solder pick-up
	-	Excellent Chemical Resistivity

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Application	-	Full process wave solder fixtures.
	-	Conformal selective wave solder fixtures.
	-	Component insertion.
	-	Silk screen printing of solder paste.
	-	SMT placement.
	-	Infra-red reflow soldering.
	-	In-line cleaning.
	-	In circuit testing.

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	Unit	Value	Test Norm
<b><u>Mechanical Properties</u></b>			
Flexural Strength at 23°C, Flatwise	MPa	400	ISO 178
Flexural Strength at 150°C, Flatwise	MPa	230	ISO 178
Flexural Strength at 200°C, Flatwise	MPa	≤ 100	ISO 178
Modulus of elasticity in flexure at 23°C, Flatwise	MPa	18000	ISO 178
Modulus of elasticity in flexure at 150°C, Flatwise	MPa	13000	ISO 178
Modulus of elasticity in flexure at 200°C, Flatwise	MPa	≤ 7500	ISO 178
Modulus of elasticity in flexure at 250°C, Flatwise	MPa	6500	ISO 178
<b><u>Electrical Properties</u></b>			
Surface Resistivity	Ω/square	10E5 to 10E9	IEC 60093
<b><u>Thermal Properties</u></b>			
Thermal Conductivity	W/m.K	0.3	DIN 52612
<b><u>Physical Properties</u></b>			
Density	g/cm <sup>3</sup>	1.8 ± 0.1	ISO 1183
Water absorption 24h 23°C	%	0.15	ISO 62
Linear Coefficient of Thermal Expansion, Parallel	K <sup>-1</sup>	10.10E-6	VSM 77110
<b>Resistance to chemical products</b>	good		

Thickness	Tolerance on nominal Thicknesses	Thickness regularity
Thickness 10.00 mm	± 0.10	0.05
10 < thickness 15.00 mm	± 0.15	0.08
Colour :- Black		

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The above information is based on the manufacturer's research and experience. We can assume no liability for this information since such responsibility is assumed by the manufacturer of the items made with our products. Whilst care was taken to ensure accuracy PPR Tooling Ltd offers no guarantee that the data presented is correct or complete

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