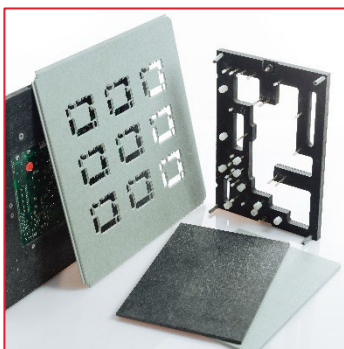
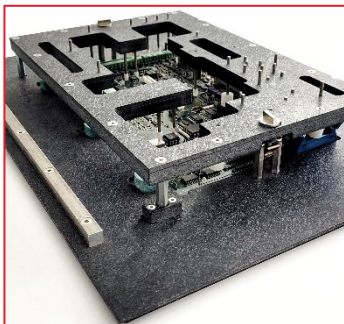


CDM® ESD 68910N

- New generation material with higher performances in temperature at 300-350 °C
- Excellent flux and chemical resistance
- Very good machinability especially on thin wall machining down to 0,5-0,7mm
- Excellent dimensional stability with very good mechanical characteristics
- Dissipative material
- Thin wall capability



Description

CDM® ESD 68910N is a composite material based on glass mat reinforcement in combination with dissipative, high temperature and high corrosion resistant resin system. **CDM® ESD 68910N** is a new generation material taking into account the necessity of thin walls machining.

Electrostatic discharge damage electronic components and circuits every day. To use CDM® will allow charges to move slowly out of the circuit and will ensure the quality of your production. CDM® ESD product have guaranteed dissipative characteristics. The CDM® range of products exhibits higher mechanical and resistance properties as standard composite materials.

The random glass mat substrate present in the **CDM® ESD 68910N** minimizes delamination problems during machining or pallet use.

Flux resistance is depending on composition and pH level. CDM® has been developed to have a better withstand towards chemicals. To preserve the stability of CDM® material, a regular cleaning can still be made.

Due to the high fiberglass content, machining is recommended with carbide or diamond toolings. Precise machining with very accurate tolerances can be achieved by experts in the conception and machining of pallets.

Exemple of applications

- Full process solder wave, SMT selective soldering process
- Components insertion
- Silk screen printing of solder paste in SMT
- SMT placement
- Reflow soldering
- Components protection
- Testing of PCBs

Availability

Standard thicknesses available: 3mm, 4mm, 5mm, 6 mm, 8 mm, 10mm, 12mm (other thicknesses available)

Standard sheet size for 3mm and 4mm: 1335 ±10mm x 1170 ±10mm

Standard sheet size for 5mm to 12mm: 2350 ±10mm x 1335 ±10mm

Thickness tolerance: ±0,10mm for 3mm to 10mm and ± 0,15mm for 12mm

Flatness (panel size 300x300mm): 0,2mm

Surface quality: sanded on both sides

Colour

Black

Technical recommendations

When in contact with aggressive chemicals, cleaning of pallets on a regular basis is recommended in order to maximize the effective life span of the CDM® pallets.

Storage: on flat and plane pallet in sane and dry warehouse. Avoid contact of CDM® material to atmospheric influences such as UV, rain, high humidity rates.

PVC packaging around the sheets and panels is preferable in case of humidity environment.

RoHS Directive

Hazardous products listed in the EU-directive 2011/65/UE (ROHS-directive), annex II and amendment 2015/863/EU, are not used as ingredients in this material.

Mechanical Properties	Unit	Value	Test Method
Flexural strength at 23 °C, ⊥	MPa	380	ISO 178
Flexural strength at 150 °C, ⊥	MPa	250	ISO 178
Flexural strength at 200 °C, ⊥	MPa	120	ISO 178
Modulus of elasticity in flexure at 23 °C, ⊥	MPa	18 000	ISO 178
Modulus of elasticity in flexure at 150 °C, ⊥	MPa	13 000	ISO 178
Modulus of elasticity in flexure at 200 °C, ⊥	MPa	8 000	ISO 178

Electrical Properties	Unit	Value	Test Method
Surface resistance (R _s)	Ω	$1 \times 10^4 \leq R_s < 1 \times 10^7$	IEC 61340-2-3 (*)
Volume resistance (R _v)	Ω	$1 \times 10^4 \leq R_v < 1 \times 10^8$	IEC 61340-2-3 (**)

Physical Properties	Unit	Value	Test Method
Density	g/cm ³	1,9 ±0,1	ISO 1183 (Method A)
Water absorption (24h 23°C)	%	< 0,15	ISO 62 (Method 1)
Linear coefficient of thermal expansion, //	K ⁻¹	10.10 ⁻⁶	TMA

Symboles	
Perpendicular to layers (flatwise)	⊥
Parallel to layers (edgewise)	//
Values also granted for ASTM D257 and STM 11.11	(*)
Values also granted for ASTM D257 and STM 11.12	(**)

The product properties set forth in this data sheet are based on the results of testing of typical material produced by Isola Composite France SAS. Some variation in product properties is typical. Comments or suggestions relating to any subject other than product properties are offered only to call the end-user's or other person's attention to considerations which may be relevant in the independent determination of the use and/or manner of use of product. Isola Composite France SAS does not claim or warrant that the use of its product will have the results described in this data sheet or that the information provided is complete, accurate or useful. The user should test the product to determine its properties and its suitability for the intended use. Isola Composite France SAS expressly disclaims any liability for any damage, harm, injury, cost or expense to any person resulting directly or indirectly from that person's reliance on any information contained in this data sheet. Nothing contained in this data sheet constitutes representation or warranty as to any matter whatsoever. Isola Composite France SAS makes no warranties whatsoever in this data sheet, expressed or implied, including any implied warranty or fitness for a particular use or purpose. Isola Composite France SAS shall in no event be liable for incidental, exemplary, punitive or consequential damages.