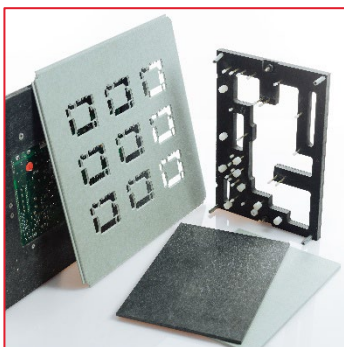
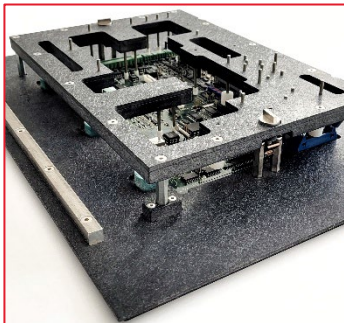
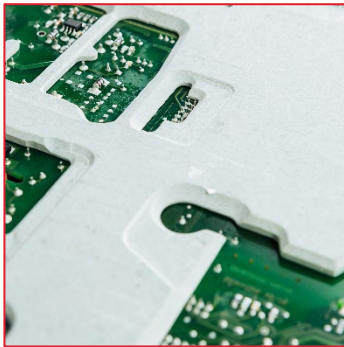


CDM® ESD 68630

- Material developed for short run soldering pallets
- Good performances at standard temperatures of 280 – 300 °C
- 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 68630 is a composite material made of glass mat, combined with a high mechanical resistance resin system, and especially developed for short run soldering pallets. This competitive material presents very satisfactory technical values with high economical advantages. **CDM® ESD 68630** 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 68630** minimizes delamination problems during machining or pallet use.

The relatively low thermal conductivity in the CDM® materials allows a rapid pallet turnaround eliminating most of the time both the necessity to provide a cooling station and the process heat sink effect experienced in the metallic pallets.

CDM® materials can substitute metallic solder frames (or other materials) with great advantages.

Flux resistance is depending on composition and pH level. Highly acid as well as basic fluxes often require a regular cleaning of remaining powders in order to preserve the stability of CDM® material. **CDM® ESD 68630** presents good resistance to chemical attacks.

Due to the high fiberglass content, machining is recommended with carbide or diamond tooling. 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	300 to 400	ISO 178
Flexural strength at 150 °C, ⊥	MPa	150 to 220	ISO 178
Flexural strength at 200 °C, ⊥	MPa	80	ISO 178
Modulus of elasticity in flexure at 23 °C, ⊥	MPa	16 000 to 20 000	ISO 178
Modulus of elasticity in flexure at 150 °C, ⊥	MPa	10 000 to 14 000	ISO 178
Modulus of elasticity in flexure at 200 °C, ⊥	MPa	7 800	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.

