Thermo-H50 (Press pad)

Product description

Thermo-H50 is a special press pad for pressing materials, which require a very high pressing temperature and a long pressing time. Thermo-H50 works very well under these extreme conditions, because of the special material composition. Thermo-H50 consists of inorganic fibers together with certain inorganic filling materials. All is kept together by a special high temperature resistant binder. Thermo-H50 is of course free of silicone and other volatiles. It has a homogeneous and flat surface. Therefore, it does not release any particles and does not leave any residues on press plates.

Application

Pressing of prepregs with resin systems, which require high curing temperatures. For example, prepregs with polyimide resin, cyanate ester resin, BT resin but also PTFE skives. Standard press pads cannot be used at such high temperatures, as they will decompose after few minutes. Thermo-H50 however withstands a temperature of 450 °C for several hours. Even under such extreme conditions Thermo-H50 guarantees good thickness leveling and a consistent temperature distribution.

Process parameter (hydraulic press)

Temperature: approx. 450 °C
Pressure: 100 – 400 N/cm^2 (10 – 40 bar)

Material properties & mech. processing

Property	typical value	test method
Density:	1.05 ± 0.10 g/cm^3	ASTM F 1315
Surface weight:	980 ± 30 g/m^2	internal
Tensile strength:	1.5 MPa	ASTM F 152
Ignition loss (@600 °C):	20 ± 2 %	ASTM F 495
Compressibility (at 69 bar):	min. 10 %	ASTM F 36
Recovery:	min. 20 %	ASTM F 36
Thermal conductivity:	0.15 W/mK	ASTM F 433
Color:	white	
Cut to size:	guillotine shears	
Punching:	possible without preheating	
Mech. processing:	carbide tools recommended	

Storage & handling

Temperature: 15 – 25 °C
Humidity: preferably 45 – 65 rh%
Storage: keep in original package until usage

Availability

Thickness: 0.80 ± 0.08 mm
Rolls: available
Sheets: e.g. 1220 x 914 mm; size and punching according customer specification

The typical values are based on data from production and from sample measurements in the lab. This data should be considered as general information. It is the responsibility of the user to ensure that the product complies with his requirements.

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