

## GRAVICOL 1091 IHB TC

BONDING PASTE - WITHOUT GLASS FIBER

Date sheet n° : 1093  
Updated : 01.12.16

Assembly	Aid to lamination	Gap filling

### DESCRIPTION

Pre-accelerated bonding paste based on unsaturated polyester resin. Cures at room temperature (15 - 25°C). Cured using MEKP peroxide.

### APPEARANCE

IHB : Quality with slow reactivity  
TC : Contains catalyst indicator

### USE AREAS

Product is suitable for many types of thin joint bonding of composite parts.

### APPLICATION

Surface to be bonded should be free from dust and contaminants which can adversely affect the bond adhesion strength. Preparation of surface is recommended using light abrasion / sanding followed by cleaning with appropriate solvent. The bonding paste is ready to use and reaction is initiated using the correct dosage of correct peroxide. Typical dosage is 1% to 2% w/w under normal workshop application conditions (15-25°C). Mix thoroughly to ensure homogeneous catalyst dispersion (this is assisted by use of catalyst indicators which change colour in TC version). Apply a uniform bead of bonding paste onto one of the surfaces and press parts together evenly to obtain the desired thickness of bond. Typically the thickness of the joint should be between 0,7mm and 5mm. We recommend allowing sufficient time for cohesive bond to form between laminates before handling bonded parts (cf : MECHANICAL PROPERTIES AFTER CURING).

### PROPERTIES / ADVANTAGES

Semi rigid bonding paste for static bonding applications. Bonding paste without fibres for thin joints. Very smooth consistency, and easy to apply with a spatula or comb applicator. Due to its non shrinkage characteristics, dimensional stability of part is maintained during the curing cycle of the paste. Low density performance after complete cure.

### STORAGE / SHELF LIFE

Shelf-life : 4 Months .  
When the product is sealed in its original packing, stored indoors away from direct sunlight and direct heat sources and ideally at ambient temperature between 15°C and 25°C .

### TYPICAL CHARACTERISTICS : LIQUID

Properties	Test method	Conditions	Unit	Typical values
Density	MT-C B 001 O	23°C	g/cm <sup>3</sup>	1,05 - 1,15
Viscosity	MT-C B 023 V	23°C - Spindle V73 - 0,5 rpm	mPa.s	1 500 000 - 3 000 000
Gel time	MT-C B 074 R	Catalyst : MEKP	min	40 - 50
Peak time	MT-C B 074 R	(250g - 23°C - 1% MEKP)	min	50 - 70
Peak exotherm	MT-C B 074 R		°C	130 - 160

### TYPICAL CHARACTERISTICS : MECHANICAL PROPERTIES AFTER CURING

Properties	Test method	Conditions	Unit	Typical values
Compressive strength	NFP 15-451		MPa	78
Flexural strength	NFP 15-451		MPa	29,5
Bond failure in the laminate	MT-C B 901 Q	20°C	h	4

For all additional information, refer to the Safety Data Sheet n° FP 13270 available on our website.

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