

PF 807

PHENOLIC PREPREG FOR GOOD SURFACE FINISH

- ↗ Crush-Core prepreg for short curing cycles
- ↗ Fast curing thermosetting resin system for sandwich structure application
- ↗ Non-halogenated resin formulation
- ↗ Good FST behaviour
- ↗ Very good surface quality
- ↗ Long shelf and shop life

INTRODUCTION

PF 807 phenolic resin is a halogen-free and self-adhesive modified phenolic system designed for very good surface-quality and excellent heat-release and smoke-density properties.

Both monolithic and sandwich structures can be easily manufactured with this prepreg. The curing can be performed by press, vacuum and autoclave moulding with a pressure of at least 0.7 bar 10 psi.

The prepreg is especially suitable for curing of sandwich panels in an isothermal press cycle without heating and cooling stages. This hot-in/hot-out crush-core process is a fast manufacturing method with curing cycles between 10-15 minutes and is mainly used to produce curved interior sandwich panels such as sidewalls or ceilings.

This prepreg has been developed in such a way that curing can be performed in a more or less isothermal press cycle, without the long heating-up and cooling-down stages of the pressing plates or moulds.

Such composite structures can be exposed easily to temperatures in the range of -55°C (-67°F) up to +90°C (194°F). The prepreg material is suitable for monolithic and sandwich structures:

- ↗ Aviation and aerospace industries
- ↗ Machine industries
- ↗ Marine and automotive applications

PRODUCT INFORMATION

PF 807 phenolic prepreg is available in a range of product formats. Please consult your local sales contact for further information. Full contact details can be found at www.gurit.com.

PROPERTY	PF 807-C08-45	TEST STANDARD
Resin	Phenolic	-
Prepreg Weight	290 ± 15 g/m ²	EN2329
Volatile	< 8.0 %	EN 2330 (180°C/10min)
Resin Flow	> 10 % (4 plies, 140°C, 10 min, 4 bar)	EN 2332
Tackiness	Dry to Medium	-
Fibre Material	3k HTA	-
Fabric Weight	160 g/m ² ± 5 %	EN 2331
Weave Style	Plain Weave	-
Service Temperature (Cured State)	-55°C to +80°C (-67°F to 176°F)	-
Resin Content	45 ± 3 %	EN 2331
Typical Roll Length	50 m / 55 yd	-
Typical Roll Width	1.55 m / 39 in	-

PREPREG PROPERTIES

TRANSPORT & STORAGE

When stored sealed & out of direct sunlight.

All prepreg materials should be stored in a freezer when not in use to maximise their useable life, since the low temperature reduces the reaction of resin and catalyst to virtually zero. However, even at -18°C (0°F), the temperature of most freezers, some reaction will still occur. In most cases after some years, the material will become unworkable.

STORAGE TEMP		UNIT	VALUE
-18°C	0°F	months	6
+21°C	+70°F	days	20

HEALTH AND SAFETY

Please refer to product SDS for up to date information specific to this product.

QUALIFICATIONS / FIRE PERFORMANCE

PRODUCT	QUALIFICATIONS	FIRE PERFORMANCE
PF 807-C08-45	↪ ATS 1000.001	↪ FAR 25.853 Flame Test (self-extinguishing)

CURING CONDITIONS

PROPERTY	CRUSH CORE	STANDARD CYCLE		TEST STANDARD
Recommended curing process	Press / Autoclave / Vacuum Bag			-
Spec. Pressure	12.5 bar	0.7 bar		-
Heat-up	None (hot-in)	3°C/min from 60°C / 140°F (max)		-
Temperature	155°C / 311°F	135°C / 275°F	145°C / 293°F	-
Cure Time	10 min	45 min	30 min	-
Cool-down	None (hot-out)	4°C/min to 60°C / 140°F		-
Remove material at	155°C / 311°F	60°C / 140°F		-

LAMINATE PROPERTIES

Laminate mechanical test data is currently in progress.

NOTICE

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The Company strongly recommends that Customers make test panels and conduct appropriate testing of any goods or materials supplied by the Company to ensure that they are suitable for the Customer's planned application. Such testing should include testing under conditions as close as possible to those to which the final component may be subjected. The Company specifically excludes any warranty of fitness for purpose of the goods other than as set out in writing by the Company. The Company reserves the right to change specifications and prices without notice and Customers should satisfy themselves that information relied on by the Customer is that which is currently published by the Company on its website. Any queries may be addressed to the Technical Services Department.

Gurit are continuously reviewing and updating literature. Please ensure that you have the current version, by contacting Gurit Marketing Communications or your sales contact and quoting the revision number in the bottom right-hand corner of this page.

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