

MP 75-90

MONO-COMPONENT EPOXY SYSTEM



MP 75-90 pre-catalysed paste for gap filling or core splicing

MP75-90 is a single component epoxy system designed to co-cure at moderate elevated temperatures with Gurit epoxy prepregs and SPRINTs™. It is a thixotropic paste ideal for any gap filling or core splicing operations during the layup of prepreg or SPRINT™. The colour is dark grey to tone in with carbon prepregs

- Co-curable with Gurit's SE75 and ST90 prepreg systems curing at 70°C and above
- Ideal for core splicing and gap filling
- Convenient 300ml cartridge format

INSTRUCTIONS FOR USE

MIXING AND HANDLING

MP75-90 is a pre-catalysed mono-component system and therefore does not need to be mixed with a hardener component. The resin requires a minimum temperature of 70°C to cure.

At room temperature, some polymerisation can occur which will thicken the product and affect its handling properties, therefore to ensure safe use the product should not be left for extended period at room temperatures or any time above 40°C.

APPLICATION

The adhering surfaces should be dry, free of grease, oil, or mould release or similar material which would prevent adhesion of the system. The product can be applied directly from cartridge with a standard mastic gun and spread if necessary with a pallet knife or spreader MP75-90 is sag resistant up to 25mm in thickness on a vertical surface and retains thixotropy even at elevated temperatures. MP75-90 can be used to fill gaps or tight radius corners in prepreg or SPRINT components. It is also commonly used as a core sheet edge splicing adhesive.

PRODUCT INFORMATION

AVAILABILITY

MP75-90 is only available in 300ml cartridges

TRANSPORT AND STORAGE

STORAGE TEMPERATURE		UNIT	VALUE
-18°C	0°F	Months	24
+18-20°C	+64-68°F	Weeks	2

To maximise the de-frosted shelf life of the material it is beneficial to maintain a cool working environment. When not in use the product should be stored frozen at -18°C (0°F)

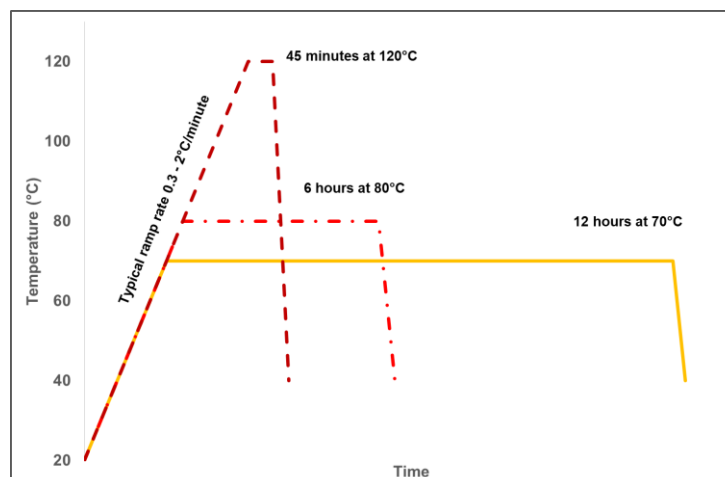
CURING INFORMATION

TYPICAL CURE TIME AND TEMPERATURES

For full cure of SFG 75-90 to be achieved, one of the following cure cycles is recommended. If SF 75-90 is being co-cured with a prepreg skin, then the cure cycle used for SFG 75-90 will also be that of the prepreg in the laminate. Where required cure cycle of the prepreg being SFG 75-90 is different, then whichever cure is the longest should be applied.

PROPERTY		OVEN/VACUUM BAG	
Typical Ramp Rate	0.3 – 2°C/minute	0.3 – 2°C/minute	0.3 – 2°C/minute
Cure Temperature	70°C (176°F)	80°C (194°F)	120°C (212°F)
Cure Dwell Time	12 hours	6 hours	45 minutes
T _{g1} (DMA)	73.5	88	115

MP75-90 has been designed to co-cure with SE75 and ST90 resin systems and follows the same curing time and temperature



CURED PROPERTIES

CURED RESIN PROPERTIES

Resin cast oven cured, mean values.

PROPERTY	SYMBOL	UNITS	12 HOURS AT 70°C (158°F)	6 HOURS 80°C (176°F)	1 HOUR 120°C (248°F)	TEST METHOD
Average cured density	t_{ply}	g/cm ³	0.68	0.68	0.66	Archimedes principle
Tensile Strength	σ_T	MPa	12.4	14.0	16.9	ISO527-2
Tensile Modulus	E_T	GPa	0.9	1.0	0.8	ISO527-2
Flexural Strength	σ_F	MPa	20.6	24.8	27.4	
Flexural Modulus	E_F	GPa	2.3	2.15	2.12	ISO 178
Charpy Impact	-	kN/m ²	77	92	93	ISO 6721 (DMA)

HEALTH AND SAFETY

The following points must be considered:

1. Skin contact must be avoided by wearing protective gloves. Gurit recommends the use of disposable nitrile gloves for most applications. The use of barrier creams is not recommended, but to preserve skin condition a moisturising cream should be used after washing.
2. If the skin becomes contaminated, then the area must be immediately cleansed. The use of resin-removing cleansers is recommended. To finish, wash with soap and warm water. The use of solvents on the skin to remove resins etc must be avoided.
Washing should be part of routine practice:
 - before eating or drinking
 - before smoking & vaping
 - before using the lavatory
 - after finishing work
3. The inhalation of sanding dust should be avoided and if it settles on the skin then it should be washed off. After more extensive sanding operations a shower/bath and hair wash is advised.

Gurit produces a separate full Safety Data Sheet for all hazardous products. Please ensure that you have the correct SDS to hand for the materials you are using before commencing work.

NOTICE

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The Company strongly recommends that Customers make test panels in the final process conditions and conduct appropriate testing of any goods or materials supplied by the Company prior to final use 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. Due to the varied nature of end-use applications, the Company does, in particular, not warrant that the test panels in the final process conditions and/or the final component pass any fire standards.

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 is continuously reviewing and updating literature. Please ensure that you have the current version by contacting your sales contact and quoting the revision number in the bottom left-hand corner of this page.

CONTACT INFORMATION

Please see local contact information at www.gurit.com

24-HOUR CHEMICAL EMERGENCY NUMBER

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