CSF 200-300

COMPOSITE SURFACE FILMS

GENERAL FEATURES

CIT CSF is a brand new range of epoxy surface films, providing a tough sandable grey surface, ideal for body-in-white parts ready for painting from the mould and to meet **automotive class A** quality criteria.

MAIN CHARACTERISTICS

- Excellent surface finishing from the mould;
- Available in 200 and 300 gsm weight;
- **Tough sandable Grey finishing**;
- Service temperature of 120 °C (248°F);
- CSF series can be co-cured with broad range of CIT prepregs
- Good handling and drapability, low tack
- Excellent resistance to **aging test PV1200** (+80°C/-40°C cycles and 80% RH)

OPERATIONAL INSTRUCTIONS

INSTRUCTION FOR USE

1. Before using the prepreg, remove the roll from the freezer and let it thaw at to room temperature for 6 hours sealed in its original package. Prepreg rolls are considered sufficiently warm when condensation no longer forms on the outside of the bag.
2. Place the CSF 200-300 on the surface of a mould that has been treated with release agent; due to the low tack of the material is recommended to remove the backing paper and apply Immediately to the mould tool surface. When in position, lift the polythene corner and remove it by pulling gently.
3. To improve the final result, remove air and ensure good contact with the mould, we recommend covering the ply of CSF 200-300 with solid release film and applying a vacuum bag at room temperature for 15 minutes.
4. Continue the lay-up with the chosen prepregs to complete the component and make up the final vacuum bag assembly for cure.

CURE PROCESS RECOMMENDATIONS

CSF 200-300 system can be cured under a wide range of temperatures (80°C-135°).

Here below a standard autoclave cure cycle:

Cure Temperature °C (°F)	Heating Ramp Rate (°C/min)	Cure Time (min)	Autoclave Pressure (bar)	Min Vacuum Bag Pressure (bar)
125 (257)	2	90	6	0.9

Personalized cure cycle and lay-up can be developed with CIT Technical Department, in order to fulfil customer manufacturing process optimization.

AVAILABILITY

CSF can be supplied in 2 standard formats:

CSF200 - 200g/m2 areal weight, 17 g/m^2 polyester carrier, 1250mm roll width

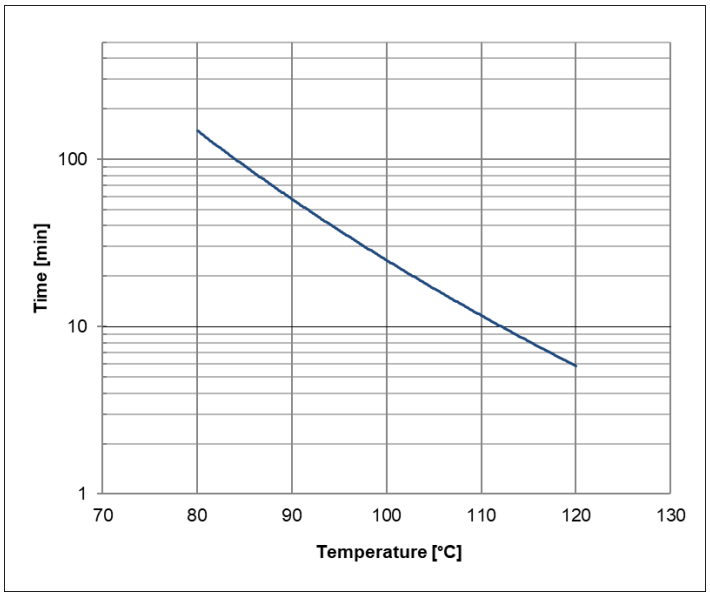
CSF300 - 300g/m2 areal weight, 17 g/m^2 polyester carrier, 1250mm roll width

PROPERTIES OF CSF

Property	Unit	Value
Storage life @ -18°C (0°F)	months	12
Out life @ 23°C (73°F)	days	>30
Density	g/cm^3	TBD
Tg (DSC)*	°C (°F)	120 (248)
Minimum Viscosity	Pa·s	160 at 82°C
Gel time at 125°C**	min	4'10"
CSF200 cured thickness	mm	0.16
CSF300 cured thickness	mm	0.24

** Dynamic analysis*
*** By hot plate*

GEL TIME



Temperature (°C)	Gel Time (min)
80	154
90	56
100	24
120	6

SAFETY CONSIDERATIONS

- Please consult the Material Safety Data Sheet.
- This product contains epoxy resin and may cause allergic reaction.
- The use of latex gloves for handling is recommended.
- Waste material should be discarded following national law.

DELIVERY FORM AND PACKAGING

Custom widths, roll size, and packaging are available on request.

Prepreg fabrics: Supplied on 75 mm (3") diameter cardboard cores with release paper on one side and polyethylene film separator on the other side. Rolls are sealed plastic bags and packed in cardboard boxes.

Standard width: 125 cm. ***Standard length:*** 25 m

HANDLING AND CONDITIONING

- Store rolls at -18 °C, sealed in original packages.
- Shop life at 23°C refers to rolls sealed in original packages.
- Before using the prepreg, remove the roll from the freezer and let it warm up to room temperature for 6 hours sealed in its original package.

IMPORTANT NOTICE:

Details provided in this document have been obtained from carefully controlled samples; data are an overview of this product and should not be intended as technical specification.
Because the properties of this product can be significantly affected by the fabrication and testing techniques employed and since CIT does not control the conditions under which its products are tested and used, CIT cannot guarantee that the properties provided will be obtained with other processes and equipment.
CIT has the right to change any data or information when deemed appropriate.

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