



OTS65

Epoxy Oven Tooling Prepreg

Introduction

OTS65 Tooling Prepreg has been formulated to give a robust surface finish with out of autoclave processing. It can be supplied on carbon or glass formats.

Typical applications: *Out of autoclave tooling*

Key Features & Benefits

- Cure temperature from **150°F to 195°F**
- Service temperature up to **260°F** after post cure
- Low CTE and shrinkage
- Work life at 70°F: **up to 21 days**
- Storage life at 0°F: **12 months**
- Very low VOC content – no added solvents during manufacture
- Out of autoclave

Storage & Out Life

This material should be kept frozen at 0°F. It must be kept sealed in a polythene bag which must not be opened until fully thawed to room temperature. If the material is not fully used, then the material must be resealed in the polythene bag to prevent moisture absorption.



Cure Cycles & performances

CURE CYCLE OPTIONS:

Temperature	Duration	Tg
150°F (minimum)	16 hours	160°F
170°F	8 hours	175°F
185°F	4 hours	195°F
195°F (maximum)	3 hours	200°F
265°F Post cure	8 hours	265°F

For optimum results out of autoclave, it is recommended that the initial cure is held at **150°F** for a minimum of **2 hours**.

- Curing Schedule is meant to be a guide only and is subject to local conditions.
- To avoid exotherm particular care must be taken with thick laminates.
Ramp rates must not exceed **2°F** per minute during **initial cure**.
Ramp rates must not exceed **1°F** per minute during **post cure** (free standing).

Volatile content	< 1.0%
Voidage (autoclave cure)	< 1.0%

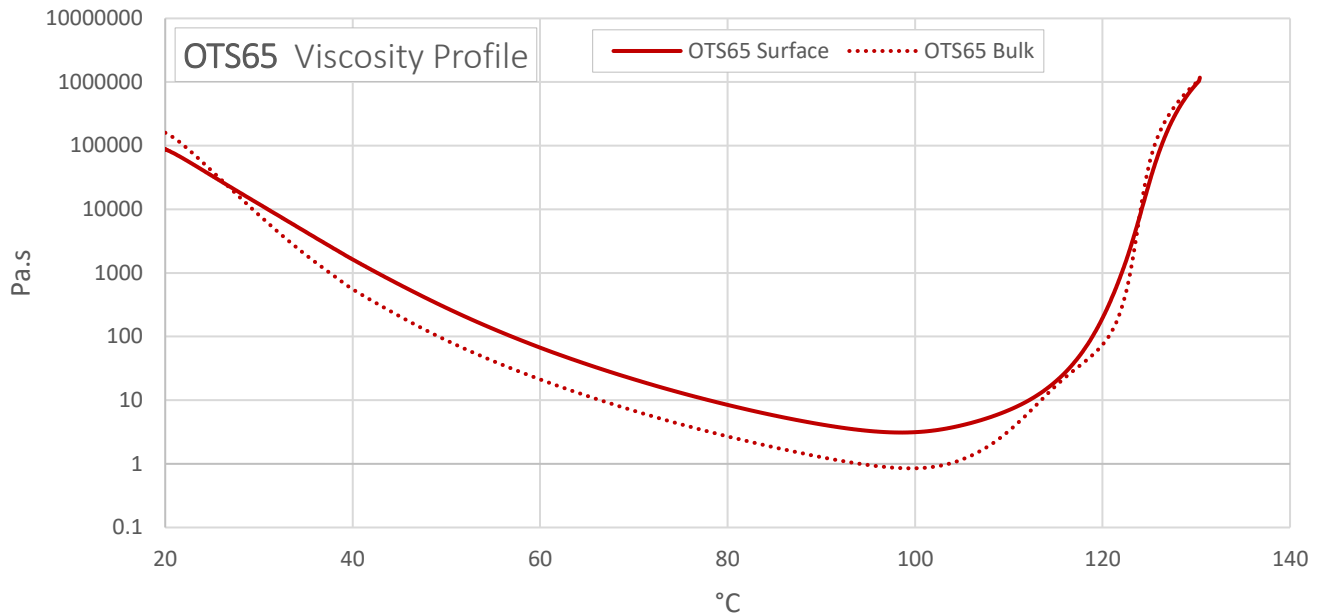
Cured Material Properties

Test	Results	Standard
DMA	Tg – Storage Modulus Onset	265 °F
	Tg – Tan δ Peak	290 °F

Data obtained after a 265°F, 8h post cure.



Viscosity Profile



Health and Safety

This material contains epoxy resin which can cause allergic reactions with skin contact and must avoid repeated and prolonged skin contact.

Please refer to the product Safety Data Sheet before using this material. The following precautions must be taken when using epoxy resin prepregs:

- Overalls must be worn
- Impervious gloves must be worn.
- Curing schedule is meant to be as a guide only and is subject to local conditions.
- To avoid exotherm, particular care must be taken with thick laminates.
- Ramp rates must not exceed 2°F/min during initial cure and 1°F/min during post cure.

Disclaimer: Technical advice, instruction, data or recommendation, whether verbal or in writing, is given in good faith. The SHD company providing any such advice gives no warranty or guarantee, whether express or implied, in relation to such advice.

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