



OM13

Structural Epoxy Matrix / Automotive Applications

Product

OM13 is epoxy matrix suitable for structural and automotive applications. It is formulated to be cured with autoclave process and press. It is translucent when cured.

Typical Applications

- » Industrial composites
- » Structural
- » Automotive

Resin Matrix Properties



Figure 1 Rheology Profile and Gel Times of OM13

Our products are flexible by design: Additional weights, roll sizes, and reinforcements are available.



Resin Properties

Property	Test Method	Value	
Cured Resin Density	EN 1183-3	1.20 g/cm ³	
Cured Resin Color	N/A Translucent		
Tg (DMA)	ASTM D4065	110°C	

Recommended Cure Cycles

Optimum properties are achieved under vacuum and 3.5 bar or higher external pressure, and cured according to one of the following:

Cure Temperature °C (°F)	Cure Method	Cure Duration (min)	
120 (248)	Autoclave or Press	60 minutes	

Recommended Curing Cycle at 120°C (248°F)

- 1) Apply full vacuum (1 bar).
- 2) Apply 7 bar gauge autoclave pressure.
- 3) Reduce the vacuum to a safety value of 0.2 bar when the autoclave pressure reaches approximately 1 bar gauge.
- 4) Heat-up at 1 3 °C/minute to 120°C (248°F).
- 5) Hold at 120°C (248°F) 60 minutes \pm 5 minutes.
- 6) Cool at 2 5 °C per minute.
- 7) Vent autoclave pressure when the component reaches 60°C (140°F) or below.

* A typical autoclave cure cycle for a thin laminate is 60 minutes at 120°C (248°F), but for a thick laminate the cure time may be extended to 2 hours at 120°C (248°F).





Physical and Mechanical Properties (Examples only. For the wider prepreg range, please contact Kordsa)

Property	Standard	Test Temp.	Property	400 GSM Carbon Twill Fabric 12K 42% Resin Content	300 GSM Carbon UD Fabric 12K 37% Resin Content
Tensile	ASTM D3039	25 °C	0° Tensile Strength MPa	900	2300
			0° Tensile Modulus GPa	65	135
			90° Tensile Strength MPa	-	40
			90° Tensile Modulus GPa	-	8
V-notch Shear	ASTM D5379	25 °C	0° Shear Strength MPa	70	60
Impact	ASTM D6110	25 °C	0° Impact Energy KJ/m²	75	125
GIC	ASTM D5528	25 °C	Fracture Toughness Mod I (J/m ²)	1000	275
GIIC	ASTM D7905	25 °C	Fracture Toughness Mod II (J/m ²)	1450	1500



Storage Requirements

Shelf life is from date of manufacturing according to storage temperature below. Working life is the cumulation of time outside of storage temperature.

Storage Condition	OM13	
Shelf Life at -18°C (0°F)	12 months	
Shelf Life at 4°C (40°F)	6 months	
Working Life at 24°C (75°F)	28 days	

Handling & Safety Instructions

» Store prepreg suspended horizontally to avoid flat spots and thinning under the weight of the roll.

» Allow product sufficient time (at least 24 hours) to reach ambient temperatures after removal from cold storage to prevent condensation on the adhesive surface.

» Use the appropriate safety equipment for this product.

» Refer to the OM13 Material Safety Data Sheet for specific safety instructions.

Technical Assistance

In a bind? Call us anytime. We provide fast and knowledgeable technical support:

Kordsa Composite Europe, İstanbul

PHONE + 90 216 300 10 00 EMAIL info@kordsa.com

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https://www.kordsa.com https://composite.kordsa.com

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