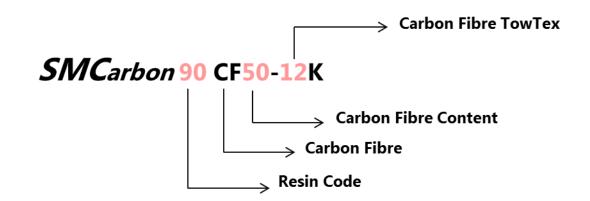


# **SMC**arbon<sup>®</sup> 90 CF50-12K

### **Generic Information**

Sheet moulding compound based on epoxy resin and reinforced with carbon fibres designed for compression moulding technology. This epoxy based SMC is suitable only for application with thickness of 15 mm at maximum.

## **Code Description**



Packaging: roll

Material width: 500 mm Shelf life at -18°C: 6 months Shelf life at RT 23°C: 4 weeks Fibre length: 25 mm

Fibre: 12K

Nominal fibre content w/w: 50 %

Areal weight: 1500 g/m<sup>2</sup>

Typical cure temperature: 135-145 °C Typical moulding pressure: 80-120 bar

Typical cure time: 90 sec/mm

## **Storage and Handling**

Store the product in its original sealed packaging at -18°C. Leave product to reach room temperature before unrolling, to prevent condensation. The usual precautions when handling uncured synthetic resins and fine fibrous materials should be observed, and a Safety Data Sheet is available for this product. The use of clean disposable inert gloves provides protection for the operator and avoids contamination of material and components.







## **Mechanical Properties on cured material**

Properties were determined on compression-moulded specimens according DIN EN 14598

Properties	Method	Unit	Value
Density	ISO 1183 A	g/cm³	1.46
Shrinkage	ISO 2577	%	-0.07
Tensile Modulus	ISO 527-4	N/mm²	29400
Tensile Strength	ISO 527-4	N/mm²	195
Flexural Modulus	ISO 14125	N/mm²	23750
Flexural Strength	ISO 14125	N/mm²	322
Impact Strength	ISO 179	KJ/m²	52
Glass Transition Temperature	ISO 11357-2	°C	150
Glass Transition Temperature (post-curing)	ISO 11357-2	°C	200

## **Additional Info**

Disclaimer: The information on this product data sheet is based on our most up-to-date knowledge. However, it is the user's responsibility to determine the suitability of a product for their application. Information and recommendations contained in this document are given in good faith without warranty or guarantee, and it is the user that is responsible for the compliance with all legal requirements. The user is urged to carry out tests for themselves to determine the suitability of any product for their proposed applications. All the trademarks, trade names, logos and other indications of origin mentioned on the product data sheet are property rights of Polynt Composites Germany GmbH.

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