

Technical data sheet

BMC RF 9/20

BMC RF 9/20 is a bulk moulding compound based on an unsaturated polyester resin, fire retardant grade, halogen-free, reinforced with glass fibres. This BMC has been developed for railway electrical application. Good mechanical properties and good fire protection grade are combined into the **BMC RF 9/20**.

BMC RF 9/20 complies with UNI CEI 11170-3. **BMC RF 9/20** is formulated according to RoHS, REAC regulation (SVHC) and WEEE European legislation.

Material code ISO 11469 >UP-(MD+GF)70FR(60)<

Typical material properties

CHARACTERISTICS	METHOD	UNIT	VALUE
Quantity of glass		%	20
Linear shrinkage	ISO 2577	%	0,1
Density	ISO 1183	g/cm ³	1,8
Water absorption	ISO 62 Met. 1	%	≤0,2
Flexural strength	ISO 14125A	MPa	90
Flexural modulus	ISO 14125A	MPa	10.000
Impact strength (Charpy)	ISO 179	KJ/m ²	30
Rockwell hardness	ISO 2039-2	HRm	80
Heat distortion temperature HDT	ISO 75	°C	≥200
Surface resistivity	IEC 93	Ω	10 ¹⁴
Volume resistivity	IEC 93	Ω mm	10 ¹⁴
Dielectric rigidity	IEC 243	KV/mm	16
Arc resistance	ASTM D 495	s	≥180
Ignitability to direct impingement of flame	ISO 11925-2	30 s	Fs≤150 mm
Reaction to fire	NF F 16-101	Class	I2
Smoke index	NF F 16-101	Class	≤F1
Glow wire GWFI	IEC 695-2-1	°C	960
Flammability	UL 94	Class / mm	V0 / 3,0

Properties were determined on compression-moulded specimens according UNIPLAST rules project 412 and 413



SMCBMC

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Storage and processing conditions

Storage	at 15-25°C, in dry ambient and out of direct sun light
Moulding time	30 s/mm
Moulding pressure	60 - 110 bar
Moulding temperature	140 - 160°C

Note: The information contained in this sheet is correct and accurate and it based on our technical and scientific knowledge and on literature at the date of going to press. Such information relates only to use of the products in the pure state and for the purposes stated herein. Nothing stated here may be taken or construed as implying of any existing patents. Nor is any warranty, whether explicit or implicit, given with regard to results to be obtained through the use of the aforesaid information.

