

NP-F 9702RC
EXTRA FLEXIBLE FBE FOR REBAR COATING
TECHNICAL DATA SHEET

Product Description:

NP-F 9702RC is a thermosetting extra flexible fast gel Fusion Bonded Epoxy Powder designed for corrosion protection of reinforcing steel. It's applied to preheated steel which melts and cures to make a uniform coating surface. It provides excellent adhesion, Extra flexibility, and corrosion protection on concrete reinforcing steel bars. It is specially designed for plain, ribbed and welded bars

NP-F 9702RC can be applied in the temperature range 230°C to 250°C from 170 to 300 microns. The powder cures with residual heat from the metal and provides optimal adhesion to the steel. It's very reactive and can be applied at high application speed.

Powder Properties:

Chemical Type		-:	Fusion Bonded Epoxy
Color		-:	Green/Blue
Gel Time at 204°C	(ISO 8130-6 Hot Plate)	-:	6 - 8 seconds
Gel Time at 232°C	(ISO 8130-6 Hot Plate)	-:	3 - 5 seconds
Cure Time at 232+3°C	(ISO 21809-2)	-:	< 30 seconds
Particle Size	(ISO 8130-1)	-:	99.8% below 250 micron
Specific Gravity	(ISO 8130-2)	-:	1.2 -1.25 g/cm ³
Moisture Content	(ISO 21809-2)	-:	Below 0.6% (At manufacturing time)
Thermal Characteristics	(ISO 21809-2)	-:	Tg1 = 55 – 70°C Tg2 = 100-112°C Delta H = 30-60 J/g

Coating Properties:

Flexibility	(ISO 14654-1999E) Rebar #6, 180degree bend Mandral Dia 4d d=10mm	:-	Pass (No cracks)
Flexibility	(ISO 14654-1999E) Rebar #5, 180degree bend Mandral Dia 6d, d=16mm	:-	Pass (No cracks)
Impact resistance	(ASTM G14)	:-	No Cracking/shattering
Pencil Hardness	(ASTM D 3363)	:-	>5H Pass
Cathodic Disbondment	(ASTM G8) 7days, 1.5V, 24°C	:-	Average 3 - 4 mm
Salt Spray	(ASTM B117) 5% NaCl 800hrs, 35°C	:-	< 3mm
Chemical Resistance	(ASTM A775/A) 45 days at 24+-2°C 3 molar CaCl ₂ 3 molar NaOH Saturated Ca(OH) ₂	:-	No Blistering or peeling No Blistering or peeling No Blistering or peeling
Thermal Characteristics	(ISO 21809-2) (Cured Film)	:-	105 +-5°C Delta Tg = +-3° C

Storage Conditions: Store Powder in a Dry cool condition below 25°C temperature & relative humidity of 65% for 6 month. Do not exceed 30°C. Keep powder in packed condition if not in use to avoid contamination and moisture. Do not mix with any other Powder.

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The information in this Data Sheet is the outcome of NP research work and experience. The information contained herein is believed to be accurate but cannot be taken as a formal warranty.