

**NP-F 9700RC  
FAST GEL FBE FOR REBAR COATING  
TECHNICAL DATA SHEET**

**Product Description:**

NP-F 9700RC is a thermosetting 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. NP-F9700RC provides excellent adhesion, flexibility, and corrosion protection on concrete reinforcing steel bars. It is based on specially selected Epoxy resins and hardeners formulated in order to meet the specifications related to the concrete reinforcing steel bar protection.

NP-F 9700RC can be applied in the temperature range 230°C to 250°C from 175 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		-:	<b>Fusion Bonded Epoxy</b>
Color		-:	Green/Blue
Gel Time at 204°C	(CSA-Z245.20-10)	-:	6 - 7 seconds
Gel Time at 232°C	(CSA-Z245.20-10)	-:	3 - 4 seconds
Cure Time at 232+/-3°C	(CSA-Z245.20-10)	-:	< 30 seconds
Particle Size	(CSA-Z245.20-10)	-:	99.8% below 250 micron
Specific Gravity	(CSA-Z245.20-10)	-:	1.37 +/- 0.05
Moisture Content	(CSA-Z245.20-10)	-:	Below 0.50% (at manufacturing time)
Thermal Characteristics	(CSA-Z245.20-10)	-:	Tg1 = 55 – 70°C Tg2 = 105 +/- 5°C Delta H = 40-60 J/g

### Coating Properties:

Flexibility	(ASTM A 775/A) Rebar #6, 180degree bend 6inch Mandrel	:-	Pass (No cracks)
Flexibility	(ASTM A 775/A) Rebar #5, 180degree bend 3.75inch Mandrel	:-	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 <sub>2</sub> 3 molar NaOH Saturated Ca(OH) <sub>2</sub>	:-	No Blistering or peeling No Blistering or peeling No Blistering or peeling
Thermal Characteristics	(CSA-Z245.20-10) (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.*