

Potting Compound / Adhesive

NS 211 Clear and Black

Product Description

Nippon Steel NS 211 is a two-part, low viscosity epoxy resin system designed primary for potting, sealing, bonding and encapsulation of many electronic components. It is available in clear or black.

NS 211 is non corrosive to copper and other metals, it imparts good resistance to abrasion, moisture and chemical resistance. It offers good thermal shock resistance and excellent retention of electrical insulation properties under high humidity conditions.

NS 211 has a pot life of approximately 75 minutes, a tack-free time of about 3 hours and is fully cured after 48 hours at 25°C.

The NS 211 is ideal for the potting and encapsulation of many heat sensitive or delicate components such as glass diodes, sensors as well as for transformers, coils, chokes, relay etc.

NS 211 has low in toxicity than aliphatic amine and exhibit high gloss film and good colour stability.

Handling / Curing Information

1. For high strength structural bonds, paint, oxide films, oils, dust, mold release agents and all other surface contaminants must be completely removed.
2. Mix thoroughly by weight (ratio 2:1) to obtain a uniform colour.
3. Apply product evenly to both surfaces to be joined for optimum bond strength.
4. Allow the curing temperature above 16°C, heat up to 93°C will speed up the curing.
5. Excess uncured can be cleaned up by xylene or ketone solvents.

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Typical Uncured Properties

Test	Part A	Part B
Colour	Clear or Black	Clear
Base	Epichlorohydrin and Bisphenol A	Cycloaliphatic
Viscosity @ 25°C	11,000 – 14,000 cps	200 – 400 cps
Density @ 25°C	1.16 g/ml	1.19 g/ml
Mixing Ratio	2 : 1 by weight	
Worklife	60 – 80 minutes @ 25°C	

Typical Cured Properties

Test	Typical Value
Colour	Clear or Black
Tack Free Time	2 – 3 hour
Shore D Hardness (ASTM D-2240)	85
Glass Transition Temperature by DSC	44°C
Tensile Strength	700 kg/cm ²
Operating Temperature	≤150°C
Intermittent Temperature	200°C
Bending Strength	800 kg/cm ²
Compressive Strength	1,000 kg/cm ²

Note: The technical information should be considered typical or representative only and should not be used for specification purposes.

Storage and Shelf Life

Storage: Store product at 16°C - 17°C for optimum storage life.

Shelf Life: 2 years when kept in original, unopened container.