



PRODUCT DATA

FERRO TECHNOLOGIES, INC.

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FERROTECH CPN-5AS

FERROTECH CPN-5AS is a water reducible pigmented core plate varnish of C-5 type for electrical steel insulation. It is applied to a clean (no water ruptures after final rinsing) steel strip on continuous lines by roll coat method. Varnish is used as received, but viscosity adjusted, as required. After curing it provides high electrical resistivity and good adhesion to the strip - there is no peeling after a 180 degree bend. **FERROTECH CPN-5AS** is a non-degrading coating, which can tolerate wet stress-relief annealing at 850-870⁰C in stacks and still electrical resistance, though will not prevent additional decarburization. However, Franklin values are not specified for this coating, due to it's low film thickness. After high temperature anneal it has good adhesion to steel surface. This coating is a thin deposition of **FERROTECH CPN-5**, used primarily to prevent sticking of semi-processed non-oriented electrical motor lamination steel during post anneal.

CHEMICAL AND OPERATING DATA

APPEARANCE	Milky gray liquid
SPECIFIC GRAVITY, g/cm ³	1.16 -1.17
WEIGHT PER GALLON, LB	9.6
TOTAL SOLIDS BY WEIGHT, %	28
TOTAL SOLIDS BY VOLUME, %	16
SOLUTION pH	8.5 -9.5
THICKNESS BEFORE CURING, μm	10 - 14
THICKNESS AFTER CURING, μm	0.4 -1.0
CURING TEMPERATURE, °C	220 - 240 (420 - 465 °F)
CURING TIME, sec	20 - 30
USE CONCENTRATION	As received
COVERAGE, sq.ft/gal	15,000

SAFETY & HANDLING

FERROTECH CPN-5AS has shelf life from 2 to 3 months and should not be frozen while storage. It is corrosive material. Use rubber gloves, apron, boots and ware goggles or face shield when handling.