

GalvaCorr® , Patented Galvanic coating for concrete

Based on technology developed at the NASA Kennedy Space Center*



PRODUCT DESCRIPTION

GalvaCorr is a three component, moisture curing, metal rich, urethane coating. GalvaCorr is a galvanic coating for concrete that uses sacrificial metals to provide cathodic protection to embedded steel rebar. GalvaCorr is electrically connected to the rebar and galvanically stops the corrosion. This eliminates the need for expensive external power sources for corrosion protection. GalvaCorr is formulated with additives that promote the galvanic action.

GalvaCorr is superior to other galvanic protection coatings in cost and ease of application. It can be spray or brush applied. Application of GalvaCorr does not require expensive surface preparation. Power washing will be sufficient in most cases.

The use of Cortec's MCI®-2020 surface applied corrosion inhibitor is an excellent complement to this system. If MCI-2020 is to be used, it must be applied prior to GalvaCorr. Also, MCI-2020 must have 8-24 hours to penetrate concrete followed by a water rinse to remove any residue. Wait an additional 24 hours, (concrete should be dry to touch), before GalvaCorr is applied.

APPLICATION CONSIDERATIONS

- GalvaCorr is not a traffic bearing coating.

FEATURES

- Low VOC
- Does not contain zinc phosphate
- Can be applied at low temperatures
- Excellent adhesion
- High solids
- Easy to apply
- Cost effective
- Prompt protection

WHERE TO USE

GalvaCorr is excellent for underside application to structures such as:

- Bridges, buildings, and foundations of all types
- Parking decks, ramps, and garages
- Commercial and civil engineered structures
- Concrete piers, offshore platforms, piles, pillars, pipes, and utility poles above water line

SURFACE PREPARATION

The substrate must be clean, dry to touch, and sound. New concrete should be cured for at least 28 days. Remove dust, laitance, grease, curing compounds, efflorescence, sealers, waxes, foreign particles, disintegrated or soft base materials, and any previous applied non-conductive coatings. Cleaning may be done by steam cleaning, water-blasting, or sand blasting.

APPLICATION

Reinforcement should be tested for continuity. Unconnected rebars may be connected by welding wires to adjacent rebars.

For best results apply the coating solution between 40%-85% relative humidity and temperatures over 32°F (0°C). Curing time is 12 hours. In conditions with lower relative humidity GalvaCorr should be lightly sprayed with water within five hours after application to assist curing. If necessary, GalvaCorr Thinner may be used if product needs thinning. Please consult a Cortec Representative for full application instructions, including how to connect the coating to the embedded reinforcement.

*NASA Advanced Materials Symposium, May 16, 2002, Cleveland, Ohio



PACKAGING AND STORAGE

GalvaCorr is available in 50 lbs/5 gal (22.7 kg/19L) kits. One kit will mix in a 5 gallon pail. Store at temperature below 95°F (35°C).

TYPICAL PROPERTIES

	Part A	Part B	Part C	GalvaCorr®
Appearance	Amber viscous liquid	Gray powder	Tan paste	Gray viscous liquid
Shelf Life	6 months	12 months	12 months	NA
Pot Life (varies with atmospheric conditions)	NA	NA	NA	2-4 hours
Mass Density	8 lbs/gal (0.96 kg/L)	10.8 lbs/gal (1.3 kg/L)	11.8 lbs/gal (1.4 kg/L)	12.4 lbs/gal (1.5 kg/L)
Solids	40%	100%	62%	81%
VOC	4.78 lbs/gal (0.57 kg/L)	NA	4.0 lbs/gal (0.48 kg/L)	1.7 lbs/gal (0.20 kg/L)
Minimum DFT	NA	NA	NA	24 mils (600µM)
Dry to Touch	NA	NA	NA	40 minutes at 68 F (20 C)
Dry to Recoat	NA	NA	NA	12 Hours
Cure Time	NA	NA	NA	12 Hours
Maximum Time to Recoat	NA	NA	NA	Unlimited
Flash Point	57 F (14 C)	799 F (426 C)	329 F (165 C)	57 F (14 C)
Theoretical Spread Rate	NA	NA	NA	60 ft ² /gal @ 24 mils (1.6 m ² /L @ 600µM)

FOR INDUSTRIAL USE ONLY

KEEP OUT OF REACH OF CHILDREN

KEEP CONTAINER TIGHTLY CLOSED

NOT FOR INTERNAL CONSUMPTION

CONSULT MATERIAL SAFETY DATA SHEET FOR MORE INFORMATION

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