



## SURFACE FINISHING LABORATORY REPORT

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**Request** : SF-20-35  
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**Customer** : Internal  
**Subject** : Evaluation of Corrosion Cure usage on steel prior to painting  
**Reference** :

### Introduction/Background

The supplier of Corrosion Cure proposed that the material can be used prior to painting steel surfaces to prevent corrosion by converting the surface to magnetite. The purpose of this study is to trial powder coat over Corrosion Cure material on ACT steel panels.

### Conclusions

After curing, Corrosion Cure must be rinsed with water applied at high pressure, as directed by the supplier PDS, before powder coat can be applied. If Corrosion Cure is not removed, the paint will blister severely.

### Method

Corrosion Cure material was applied a number #20 draw down bar and allowed to cure overnight at room Corrosion Cure. Water pressure was varied when the cured Corrosion Cure material was removed from the panel.

## Results

Corrosion Cure, when applied to steel, appears as a milky emulsion that then cures to a waxy solid overnight. The following photographs show panels that have been powder coated after Corrosion Cure. The first set of photographs shows panels that have not been rinsed; these panels have severe blistering. When a hose with a regular nozzle is used to rinse the panels, most of the waxy coating is removed. Where the material was removed, paint was applied and appears as usual, however wherever Corrosion Cure remained, the paint appeared to blister after curing. The PDS for Corrosion Cure recommends that the material is removed using a pressure washer after cure. In order to achieve complete removal of the coating, a high pressure nozzle was fitted to the hose. Higher pressure rinsing allowed the coating to be removed. The steel surface revealed had a slightly matte/different color compared to uncoated steel. Appearance was difficult to capture by photograph and is not pictured below.

**Powder coat over  
Corrosion Cure with no  
rinse**



**Powder coat over  
Corrosion Cure with mild  
rinse**



**Powder coat over  
Corrosion Cure with rinse**

