**Powercrete® R65-F1**

Liquid Epoxy Coating with Quick Application and Long Term Corrosion Protection of Bare Steel

**Powercrete R65-F1** is a 100% solids liquid epoxy coating with quick cure time for efficient, user-friendly application to allow fast backfill. Along with excellent application productivity, R65-F1 provides sound longterm corrosion protection of the bare steel substrate, outstanding adhesion, abrasion, and impact resistance. This high build two component epoxy can easily achieve a dry film thickness of up to 40-mils in a single application. Product can be applied on bare steel by spray or by hand (brush, roller, and trowel). Powercrete R65-F1 unique combination of handling and performance is best suited for girth welds corrosion protection of the new and rehabilitation of the operational pipeline. For large diameter pipe, please consult a Covalence Adhesives representative.

This Manual Application guides gives detailed explanation on manual application of Powercrete R65-F1. For spray application refer to application specifications for plant or field applied Powercrete R65-F1 over bare steel.

### 1. Product

1. The two component epoxy coating is supplied in premeasured kits. Part A (large container) is the base and Part B (small container) is the curing agent. Prior to application insure that the temperature of both parts is above 20º C (68º F).

### 2. Application Kit (Optional)

2. The application kit contains latex gloves, trowels, mixer for electric drill, hand stirrer, wet mil gauge, and disposable face mask

### 3. Surface Preparation

3. Insure that the surface is clean of grease, oil, salts, and other contaminants. If necessary, use Acetone, MEK or other suitable solvent. Perform cleaning when pipe is 3º C (5º F) above dew point.

### 4. Surface Preparation

4. Blast clean surface to a near white ISO-8501, NACE No. 2, SA-2 1/2 (SSPC-SP 10) or better using particle blasting (sand or other). Sweep blast adjacent FBE coating 50 mm (2") to either side of bare steel area (cutback).

### 5. Surface Preparation

5. Establish a 2.5-4 mils (64-100 microns) surface profile with sharp angularity. Burnishing or polishing must be avoided. Surface preparation can be controlled using surface profile tape. Dry surface and insure ideal surface preparation.

### 6. Surface Preparation

6. While not always necessary, preheating can be useful just prior to application:  
   a) to eliminate moisture, preheat the cutback area to approximately 40º C (104º F);  
   b) to accelerate curing, preheat the cutback area to approximately 80º C (176º F).

**Application kits are not required for proper installation of Powercrete.**
7. Combining and Mixing

7. If necessary, warm parts A and B to 20°C (68°F). Agitate part B before mixing. Mix by pouring all of part B into part A. Thoroughly scrape container and lid of part B. Slowly begin mixing to avoid introducing air into the mixture.

8. Mixing

8. Use mixing speed that uniformly blends the 2 parts, but doesn’t create a vortex in the mixture or spillage. Blend both parts to create a uniform color with no streaks.

9. Application

9. Reconfirm that the application temperature is above 10°C (50°F) and 3°C (5°F) above dew point. Slowly pour mixed epoxy onto the pipe. Apply thin film evenly to wet out substrate, then build coating to desired thickness. If the pipe is heated before and during application, R65-F-1 can be applied at temperatures below 10°C (50°F).

10. Application

10. Use trowel, brush or roller to apply required minimum thickness of coating. Cover at least 50 mm (2”) of the adjacent mainline coating.

11. Thickness Measurement

11. Use a wet mill gauge to measure that the desired minimum thickness has been achieved. Double check around the weld to insure minimum desired thickness.

12. Cure Times

12. The curing rate will vary according to pipe and ambient application temperature. Refer to Cure Chart to determine when to perform a shore D check.

Storage

For optimum performance, store Powercrete® Epoxy products in a dry, well-ventilated area. Maintain products in original packaging and sealed until just before use. Avoid exposure to direct sunlight, rain, snow, dust or other adverse environmental conditions or contaminates.

NOTE: Avoid prolonged storage at temperatures above 40°C (104°F) or below 5°C (40°F).

Safety Guidelines

Important: Read the MSDS prior to using the products. Product installation should be done in well-ventilated area and in accordance with local health and safety regulations. These application guidelines are intended as a guide for standard products. Consult Protection Engineering for specific projects or unique applications.

Berry Plastics warrants that the product conforms to its chemical and physical description and is appropriate for the use stated on the technical data sheet when used in compliance with Berry Plastics written instructions. Since many installation factors are beyond the control of Berry Plastics, the user shall determine the suitability of the products for the intended use and assume all risks and liabilities in connection herewith. Berry Plastics liability is stated in the standard terms and conditions of sale. Berry Plastics makes no other warranty either expressed or implied. All information contained in this technical data sheet is to be used as a guide and is subject to change without notice. This technical data sheet supersedes all previous data sheets on this product.

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