# Product Data Sheet

RCC CORROSION CONTROL

# COROGARD 66 EP
## 100% Solids Flake Filled Epoxy Coating

## PRODUCT DESCRIPTION
**COROGARD 66 EP** is a two-component, 100% solids, flake filled Epoxy coating system.

## COATING LAYERS COMPOSITION
The coating system consists of a primer (**COROFLAKE 67PS PRIMER**) and two coats of **COROGARD 66 EP** applied at 6-8 mils (150-200 µm) DFT per coat. Total coating thickness is 12-16 mils (300-400 µm) with a target of 14 mils (350 µm) DFT.

## FIELDS OF APPLICATION
**COROGARD 66 EP** is used to protect steel and concrete structures that are exposed to a wide range of alkalis, salts and many mild inorganic and organic acids. It is also commonly used as a topcoat for other epoxy based coating, lining and flooring systems from RCC Corrosion Control. Applications include protection of tanks, secondary containment structures and process floor areas.

## FEATURES
- Easy to apply (spray, roller, brush)
- Solvent free, low odor
- Multi-purpose coating material
- Excellent chemical resistance to alkalis, many acids and other corrosive chemicals

## CHEMICAL RESISTANCE
Information on the chemical resistance properties is available upon request.

## SURFACE PRE-TREATMENT
**Carbon steel**

For immersion or frequent spillage conditions, abrasive blast to “White Metal” in accordance with SSPC SP-5, NACE Specification #1 or SA 3. For fumes or occasional spill exposure and dry environments, abrasive blast to “Near White” in accordance with SP-10, NACE #2 or SA 2 1/2. A minimum surface profile of 3 mils (75 µm) is required. Refer to specification, RCC TT-14. After blast cleaning the steel surface shall be primed or coated before the formation of any rust bloom. For direct to metal coating options consult RCC Corrosion Control.

**Concrete**

The concrete shall have a minimum compressive strength of 3500 psi (25 N/mm²) and a minimum surface strength of 200 psi (1.4 N/mm²) for coatings and 300 psi (2.1 N/mm²) for linings. The concrete must be thoroughly cured and dry at the time of application. The residual moisture content should not exceed 4%.

ASTM D 4263 plastic sheet test method is recommended to ensure concrete is moisture free. If moisture is detected, repeat test until dry.

Abrasive blast or mechanically abrade the surface to remove the weak laitance and surface contaminants. Refer to specification, RCC TT-3 for details.

## APPLICATION
- **COROFLAKE 67PS PRIMER** is normally applied in one coat at 2-5 (50-125 µm) WFT using a roller or brush. Apply the primer to the prepared substrate and let it cure before over-coating.
- **COROGARD 66 EP** is applied by airless or conventional spray, by roller, squeegee or brush. Apply **COROGARD 66 EP** in two coats at 6-8 mils (150-200 µm) DFT per coat for a total of 12-16 mils (300-400 µm) DFT. Allow the first coat to cure tack free before applying the second coat.

**Note**: During application the lined surface should be shaded from direct or indirect sunlight when possible. In atmospheric exposure **COROGARD 66 EP** has a tendency to chalking with time.

## MIX RATIO
The mix ratio of **COROFLAKE 67PS PRIMER Resin** to **Hardener No. 7** is 2:1 by volume. The mix ratio of **COROGARD 66 EP Resin** to **Hardener No.11** is 2:1 by volume.

## CONSUMPTION

| Layer | Thickness mils (µm) | Coverage |
|---|---|---|
| PRIMER on steel | 2-5 (50-125) | 250-300 ft²/gal |
| PRIMER on concrete | 2-5 (50-125) | 160-200 ft²/gal |
| BASECOAT COROGARD 66 EP Resin & Hardener | 6-8 (150-200) | 160-220 ft²/gal |
| TOPCOAT COROGARD 66 EP Resin & Hardener | 6-8 (150-200) | 160-220 ft²/gal |

## WORKING TIME & RECOAT TIME

| Temperature | Working Time | Min Recoat | Max Recoat |
|---|---|---|---|
| 50°F (10°C) | 60 min | 16 hrs | 2 weeks |
| 70°F (21°C) | 40 min | 8 hrs | 2 weeks |
| 90°F (32°C) | 20 min | 4 hrs | 1 week |

## CURE TIME (to place in service)

| Temperature | Minimum Cure time |
|---|---|
| 50°F (10°C) | 5 days |
| 70°F (21°C) | 3 days |
| 90°F (32°C) | 2 days |

Generally **COROGARD 66 EP** can be placed in service after the final cure time intervals have been achieved. Shorter or longer intervals may apply depending on service conditions. Consult RCC Corrosion Control for specific recommendations.

**CLEANING**: Solvent T-100

## SAFETY MEASURES

The material safety data sheets of the individual components as well as the legal requirements for handling hazardous materials must be observed.

## PACKING UNITS

The products are supplied in the following standard package sizes:

| Description | Package Size |
|---|---|
| **COROFLAKE 67PS PRIMER** | .75, 3, 15, 45 gal kits |
| **COROGARD 66 EP** | .75, 3, 15 gal kits |

## STORAGE

The materials must be stored in a cool and dry place. At storage temperature of 70°F (21°C) the shelf life is as follows:

**COROFLAKE 67PS PRIMER Resin** 24 months
**Hardener No. 7** 24 months
**COROGARD 66 EP Resin** 24 months
**Hardener No. 11** 24 months

If the storage time is exceeded, the materials must be tested before use. Higher storage and transport temperatures will reduce the shelf life. The containers must be kept tightly closed. Liquid products must be stored frost-proof.

| Technical Data | Testing Standard | Unit | Value |
|---|---|---|---|
| Density | ASTM D1475 | lbs/gal<br>kg/l | 10.39±0.25<br>1.24 |
| Viscosity - mixed | ASTM D2393 | cps<br>mPa·s | 2500 ± 250 |
| Modulus of Elasticity (Bend Test) | ASTM D790 | Psi<br>MPa | 150,000<br>1034 |
| Tensile Strength | ASTM D638 | Psi<br>MPa | 2400<br>16.5 |
| Adhesion Strength - Concrete | ASTM D7234 | Psi<br>N/mm² | Exceeds concrete strength |
| Minimum Adhesion Strength - Steel | ASTM D4541 | Psi<br>N/mm² | 1000<br>7 |
| Volatile Organic Compounds | EPA Method 24 | g/L<br>lbs/gal | 46<br>0.38 |
| Maximum Operating Temperature*<br>Immersion<br>Splash/Spill<br>Continuous Dry | | <br>°F °C<br>°F °C<br>°F °C | <br>120 49<br>160 71<br>220 104 |

***Maximum operating temperature limits may vary depending on actual service conditions**

We warrant that our goods will conform to the description contained in the order and that we have good title to all goods sold. This Product Data Sheet is considered accurate and reliable to the best of our knowledge at the date of its publication, but are used as guides only. The user assumes all risks and liabilities in connection therewith regardless of any suggestion, we may give. We assume no liability for performance of the product or for any loss or damage resulting from its use. Our liability, in law and equity, shall be expressly limited to the replacement of non-conforming goods at our factory, or at our sole discretion, to repayment of the purchase price of the non-conforming goods.