

Selection & Specification Data

GENERIC TYPE : Polyamido-Amine Epoxy

Description : Penetrating primer/sealer for use on concrete substrates and Carboline Pyrocrete Fireproofing products. It performs extremely well in sealing cementitious surfaces and is designed to receive a variety of different generic types of finish coats. Some recommended uses of 1340N(K) include the use as a curing compound or form release agent. When applied to "green" concrete it will retard the escape of moisture during the cure period. It is also excellent for use as a form release coating on plywood or steel forms. Meets the requirements of ASTM C309 when applied at 5.0-10.0 mils (125-250 microns) wet.

- Features**
- Exceptional wetting characteristics
 - Low stress, highly flexible film
 - Very high solids
 - Low odor
 - User-friendly brush & roller applications
 - Nuclear Service Level 1

Color Clear Amber(0910)

Finish Gloss

Primers Self-priming. May be applied over most generic types of coatings.

Topcoats Acrylics, Epoxies, Polyurethanes

Dry Film Thickness : 1.0-2.0 mils (25-50 microns) DFT for most applications but can be applied up to 4.0 mils (100 microns) for sealing rough surfaces or shot-blasted concrete. When used as a curing and/or form release agent, it may be applied up to 10.0 mils(250 microns) wet.

Solid Content By Volume 98% ± 2%

Theoretical Coverage Rate : 1572 mil ft²(38.5 m²/l at 25 microns) Allow for loss in mixing and application. Porous and irregular substrates like concrete/fireproofing coverage rates and should be taken into account.

VOC Values As supplied: 0.2 lbs/gal (24 g/l)
EPA Method 24: 0.8 lbs/gal (95 g/l)
Thinned:
25 oz/gal w/ #76: 1.8 lbs/gal (214 g/l)
These are nominal values.

Dry Temp. Resistance Continuous: 175°F (79°C)
Non-Continuous: 200°F (93°C)

- Limitations**
- Epoxies lose gloss, discolor and eventually chalk in sunlight exposure
 - Do not use for immersion service.

Substrates & Surface Preparation

Concrete Surfaces must be clean and dry. Employ adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating.

As a curing Membrane : Carboguard 1340N(K) has been tested in accordance with ASTM C309-98a Standard Specification for Liquid Membrane Forming Compounds for Curing Concrete and passes the requirements set forth in the standard. While 1340 may be applied to green concrete, generally additional coats or other coatings should not be applied until the concrete has cured 28 days at 75°F (24°C) and 50% R.H. or equivalent. Prior to topcoating we recommend that a test patch be applied to insure proper adhesion.

General : Concrete must be cured 28 days at 75°F (24°C) and 50% relative humidity or equivalent. Prepare surfaces in accordance with ASTM D4258 Surface Cleaning of Concrete and ASTM D4259 Abrading Concrete. Voids in concrete may require surfacing. Application prior to surfacing assures tight adhesion between concrete and surfacers or membranes. Compatibility with other coatings, surfacers and polyurethane membranes eliminates need for form release oils or curing oils.

Pyrocrete Fireproofing Products : Contact Carboline Technical Service or your Carboline sales representative for specific applications and requirements.

Previously Painted Surfaces : Lightly sand or abrade to roughen and degloss the surface. Existing paint must attain a minimum 3B rating in accordance with ASTM D3359 "X-Scribe" adhesion test.

Application Equipment

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

General Guidelines:

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|-------------------------------------|---|
| Spray Application (General) | Contact Carboline Technical Service for spray equipment and technique. |
| Brush & Roller (General) | Avoid excessive re-brushing or re-rolling. Apply only enough material to wet the surface uniformly. Any puddles formed must be brushed out. |
| Brush | Use a medium bristle brush |
| Roller | Use a medium or long-nap synthetic roller cover with phenolic core. |

FEB 2013 replaces SEP 2007

To the best of our knowledge the technical data contained herein are true and accurate at the date of issuance and are subject to change without prior notice. User must contact Carboline to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Carboline quality control. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of products. Prices and cost data if shown, are subject to change without prior notice. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY THE SELLER EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OR LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE

Carboguard[®] 1340N(K)

Mixing & Thinning

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|-----------------|--|
| Mixing | Power mix separately, then combine and power mix. DO NOT MIX PARTIAL KITS |
| Ratio | 1:1 Ratio (A to B) |
| Thinning | Normally not required but may be thinned up to 25 oz/gal (20%) with Thinner #76. Use of thinners other than those supplied or recommended by Carboline may adversely affect product performance and void product warranty, whether expressed or implied. |
| Pot life | 45 minutes at 75°F (24°C). Pot life will be less at higher temperatures. |

Cleanup & Safety

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| Cleanup | Use Thinner #2 or Acetone. In case of spillage, absorb and dispose of in accordance with local applicable regulations. |
| Safety | Read and follow all caution statements on this product data sheet and on the MSDS for this product. Employ normal workmanlike safety precautions. Hypersensitive persons should wear protective clothing, gloves and use protective cream on face, hands and all exposed areas. |
| Ventilation | When used in enclosed areas and product is thinned, thorough air circulation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapor concentration from reaching the lower explosion limit for the solvents used. User should test and monitor exposure levels to insure all personnel are below guidelines. If not sure or if not able to monitor levels, use MSHA/NIOSH approved respirator. |
| Caution | This product exotherms at the end of its pot life. Any unused quantities will become extremely hot. The material begins to thicken at the end of its pot life, which is an indication of exotherm. Immediately spread out on an appropriate surface or add sand or other suitable heat sink to the unused material to reduce the severity of exotherm. Take appropriate precautions against breathing fumes. This product when thinned contains flammable solvents. Keep away from sparks and open flames. All electrical equipment and installations should be made and grounded in accordance with the National Electric Code. In areas where explosion hazards exist, workmen should be required to use non-ferrous tools and wear conductive and non-sparking shoes. |

Application Conditions

| Condition | Material | Surface | Ambient | Humidity |
|-----------|----------------------|----------------------|----------------------|----------|
| Normal | 50-85°F (10-29°C) | 50-90°F (10-32°C) | 50-90°F (10-32°C) | 0-80% |
| Minimum | 39°F(4°C) | 41°F(5°C) | 41°F(5°C) | 0% |
| Maximum | 90°F(32°C) | 130°F(54°C) | 100°F(38°C) | 90% |

This product simply requires the substrate temperature to be above the dew point. Condensation due to substrate temperatures below the dew point can cause flash rusting on prepared steel. Special application techniques may be required above or below normal application conditions.

Curing Schedule

| Surface Temp. & 50% Relative Humidity | Dry to Topcoat or Handle | Maximum Recoat Time w/Water Borne | Maximum Recoat Time w/Solvent Borne | Final Cure |
|---------------------------------------|--------------------------|-----------------------------------|-------------------------------------|------------|
| 41°F (5°C) | 36 Hours | 14 Days | 30 Days | 5 Days |
| 50°F (10°C) | 24 Hours | 14 Days | 30 Days | 3 Days |
| 75°F (24°C) | 12 Hours | 14 Days | 30 Days | 2 Days |
| 90°F (32°C) | 6 Hours | 7 Days | 14 Days | 1 Days |

These times are based on a 1.0-2.0 mil (25-50 micron) dry film thickness. Higher film thickness, insufficient ventilation or cooler temperatures will require longer cure times and could result in solvent entrapment and premature failure. Excessive humidity or condensation on the surface during curing can interfere with the cure, can cause discoloration and may result in a surface haze. Any haze or blush must be removed by water washing before recoating. During high humidity conditions, it is recommended that the application be done while temperatures are increasing. If the maximum recoat time is exceeded, the surface must be abraded by sweep blasting or sanding before the application of additional coats.

Curing Schedule for Curing/Form Release Agent

| Surface Temp. & 50% Relative Humidity | Dry to Topcoat or Handle | Final Cure |
|---------------------------------------|--------------------------|------------|
| 75°F (24°C) | 5 Hours | 6 Days |

These times are based on 5.0-10.0mils(125-250 microns) dry film thickness.

Packaging, Handling & Storage

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|---|---|-----------------------------|
| Shipping weight (Approximate) | 0.5 Gallon Kit 6lbs(3kg) | 2 Gallon Kit 22lbs(10kg) |
| Flash Point (Setaflash) | Part A: > 205°F(96°C) Part B: > 205°F(96°C) | |
| Storage Temperature & Humidity | 40- 110°F(4-43°C) Store indoors. 0-90% Relative Humidity | |
| Shelf Life | Part A & B: Min.36 months at 75°F (24°C) | |

***Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.**

CAUTION: CONTAINS FLAMMABLE SOLVENTS. KEEP AWAY FROM SPARKS AND OPEN FLAMES. IN CONFINED AREAS WORKMEN MUST WEAR FRESH AIRLINE RESPIRATORS. HYPERSENSITIVE PERSONS SHOULD WEAR GLOVES OR USE PROTECTIVE CREAM. ALL ELECTRIC EQUIPMENT AND INSTALLATIONS SHOULD BE MADE AND GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. IN AREAS WHERE EXPLOSION HAZARDS EXIST. WORKMEN SHOULD BE REQUIRED TO USE NONFERROUS TOOLS AND TO WEAR CONDUCTIVE AND NONSPARKING SHOES.

