

PRODUCT NUMBER: 7-1870

DESCRIPTION: High Performance Putty Rebar Patching Compound

Introduction:

A high-performance, two part putty epoxy material Nap-Gard[®] 7-18670 is formulated for Field Coating of Rebar and coating repair for Nap-Gard 7-2719.

PRODUCT PROPERTIES

Color:	Green	Theoretical Coverage:	81.6osq.ft./mil/lb. (1.0m ² /Liter/mm)
Components:	7-1870A Base 7-1870B Converter	Mixing Ratio:	4.3:1 by volume
Shelf Life:	2 Years minimum if kept unmixed and below 25°C (77°F)		

TYPICAL PROPERTIES OF APPLIED FILM

Pot Life:	20 minutes @ 24°C (75°F)	Volume Solids (50% R.H.):	100%
Cure Time:	16 Hours @ 75°F (24°C) 50% R.H. : (75% Cure) 7 days full cure	Handle:	2 1/2 Hrs. to 3 Hrs. @ 27-32°C (80°-90°F)
Dry Film Per Coat:	625µm (25 mils) minimum	Cured Hardness Shore D: (ASTM D2240-91)	90D
Number of Coats:	One		
Specific Volume:	12.5 in ³ / lb.	Compressive Strength: (ASTM D-695)	18,000 psi
Dielectric Strength: ASTM D149	382 v/mil		

Revised 12/06/2004

DuPont Powder Coatings, U.S.A.
9800 Genard Rd.
Houston, TX 77041
Tel.: 713-939-4000
Fax: 713-939-4027
www.dupontpowder.com

WARRANTY POLICY: Seller certifies that all coatings delivered to Customer in unopened factory filled containers meet all pertinent quality standards presented in its current published literature. Since matters of surface preparation, application procedures, curing procedures and other local factors that affect coating performance are beyond Seller's control, Seller assumes no liability for coating failure other than to supply replacement material for a coating material proven to be defective. Customer will determine suitability of this product for its use and thereby assumes all risks and liabilities in connection therewith. Seller will not be liable for any injuries, damages or other losses derived, directly or indirectly, from or as a consequence of Customer's use of the product. SELLER DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, RELATING TO ITS PRODUCTS AND THEIR APPLICATION, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSES.

CHEMICAL RESISTANCE TESTS

7 days room temperature cure (30 days immersion at 75°F)

5% Bleach	E
5% Trisodium Phosphate	E
10% Sulfuric Acid	E
50% Sulfuric Acid	E
10% Hydrochloric Acid	E
10% Nitric Acid	VG
40% Nitric Acid	F
10% Acetic Acid	U
10% Phosphoric Acid	VG
40% Phosphoric Acid	F
10% Sodium Hydroxide	E
50% Sodium Hydroxide	E
5% Alum (Aluminum Sulfate)	E
Ferric Chloride	E

Key: E = Excellent, VG = Very Good, F = Fair, U = Unsatisfactory

ASTM A 934-97, ASTM A 775-97 TESTS

Passes Cathodic Disbondment & Salt Fog Tests

Meets the requirements of ASTM D3963-96a Standard Specification for Fabrication and Jobsite Handling of Epoxy-Coated Reinforcing bars. Chloride ion permeability tested by an independent lab, per Annex A1. Coating passed giving permeability of less than 1×10^{-4} @ less than 7 mils.

APPLICATION GUIDELINES

Surface Preparation:

Proper surface preparation is essential to a successful application. The following procedures should be considered:

- First, degrease the surface by using a good, fast, evaporating degreaser. All oil, grease, loose paint, rust, water and dirt must be removed before applying any epoxy material.
- For damages limited to the top coat, the damaged areas of the Nap-Gard coating should be repaired by first slightly abrading the sound coating surrounding the damage with emery cloth before applying the patching compound.
- Metal that has been exposed to sea water or other salt solutions should be grit blasted and high pressure water blasted and left overnight to allow any salts in the metal to "sweat" to the surface; repeat blasting to "sweat out" all the soluble salts. A test for chloride contamination should be performed prior to any epoxy application. The maximum soluble salts left on the substrate should be no more than 40 micro grams per square meter.
- For optimal adhesion and durability, roughen the metal surface with 60 - 80 grit sand paper, wire brush or abrasive disk to expose a bare abraded metal surface. This creates improved adhesion for impact and long-term corrosion protection.
- Under cold working conditions, heating the repair area to 38 - 43°C (100 - 110°F) immediately before applying Nap-Gard 7-1870 is recommended. This procedure dries off any moisture, and assists the epoxy in achieving maximum adhesion to the substrate.
- All prepared surfaces should be repaired as soon as possible, to eliminate any changes or surface contaminants.

Revised 12/06/2004

DuPont Powder Coatings, U.S.A.
9800 Genard Rd.
Houston, TX 77041
Tel.: 713-939-4000
Fax: 713-939-4027
www.dupontpowder.com

WARRANTY POLICY: Seller certifies that all coatings delivered to Customer in unopened factory filled containers meet all pertinent quality standards presented in its current published literature. Since matters of surface preparation, application procedures, curing procedures and other local factors that affect coating performance are beyond Seller's control, Seller assumes no liability for coating failure other than to supply replacement material for a coating material proven to be defective. Customer will determine suitability of this product for its use and thereby assumes all risks and liabilities in connection therewith. Seller will not be liable for any injuries, damages or other losses derived, directly or indirectly, from or as a consequence of Customer's use of the product. SELLER DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, RELATING TO ITS PRODUCTS AND THEIR APPLICATION, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSES.



MIXING: Mix Ratio - Resin (Component A) to Hardener (Component B); Weight 4.3:1

Nap-Gard 7-1870 is formulated to be non-sagging and able to coat metal in multiple coats up to 5/8" thickness. The mixing ratio by weight of 7-1870 is: 0.813lbs. part "A" to 0.187 lbs. "B". (The cans containing components A and B are filled to above specifications so they can be mixed together.)

Components "A" and "B" are to be blended thoroughly together until components form a homogeneous paste without color streaks or striations. The final desired color is a Light Green. Thus allowing field inspectors to tell at a glance whether or not the specifications have been met.

APPLICATION:

For best results, product should be kept and applied at room temperature. Nap-Gard 7-1870 can be applied when temperatures are between 13°C and 32°C (55°F and 90°F). When temperatures are below 21°C (70°F), cure and pot life will be longer, and above room temperature, cure and pot life will be much shorter. After the initial coat, Nap-Gard 7-1870 can be applied in a single or multiple coats to the specified thickness. Recoat time between coats is 2 - 4 hours, maximum recoat time is 4 hours. Nap-Gard 7-1870 may be troweled on a vertical or overhead application up to 1/2" thickness without sagging. The blended 7-1870 material should be applied to a film thickness of 25 mils.

CURE:

Working time is 20 minutes at 25°C (75°F). 75% cure is achieved in 16 hours at room temperature. For maximum physical properties, Nap-Gard 7-1870 can be heat-cured for 4 hours @ 95°C (200°F) after curing at room temperature for 2 1/2 hours. Remember, the maximum recoat time between coats is 4 hours. This alleviates intercoat adhesion problems. At ambient temperature of 27°C - 32°C (80°F to 90°F), the applied 7-1870 film will cure sufficiently hard for handling in approximately 3 hours. Please note: This system will not completely cure under 13°C (55°F).

PRECAUTION:

For complete safety and handling information, please refer to the appropriate Material Safety Data Sheets prior to using this product.

Revised 12/06/2004

DuPont Powder Coatings, U.S.A.
9800 Genard Rd.
Houston, TX 77041
Tel.: 713-939-4000
Fax: 713-939-4027
www.dupontpowder.com

WARRANTY POLICY: Seller certifies that all coatings delivered to Customer in unopened factory filled containers meet all pertinent quality standards presented in its current published literature. Since matters of surface preparation, application procedures, curing procedures and other local factors that affect coating performance are beyond Seller's control, Seller assumes no liability for coating failure other than to supply replacement material for a coating material proven to be defective. Customer will determine suitability of this product for its use and thereby assumes all risks and liabilities in connection therewith. Seller will not be liable for any injuries, damages or other losses derived, directly or indirectly, from or as a consequence of Customer's use of the product. SELLER DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, RELATING TO ITS PRODUCTS AND THEIR APPLICATION, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSES.

