



# Nap-Gard<sup>®</sup>

## 7-1854

## Two-Part Epoxy Repair Cartridge

Revised: 7 March 2014

### DESCRIPTION

A high-performance two part epoxy repair material Nap-Gard<sup>®</sup> 7-1854 is formulated for Field Coating of Girth Welds and coating repair for Nap-Gard<sup>®</sup> DPS Gold. It is resistant to Cathodic Disbondment at temperatures up to 150°C (302°F).

### TYPICAL LIQUID PROPERTIES

<b>Color:</b>	Gold	<b>Theoretical Coverage:</b>	1604 (ft <sup>2</sup> /u.s. gal/mil)
<b>Components:</b>	7-1854 Cartridge		
<b>Shelf Life*:</b>	Store in cool, dry, well-ventilated area at temperatures between 5°C (41°F) and 40°C (104°F).		
<b>Mixing Ratio:</b>	The Shelf Life is a maximum of 24 months in unopened containers. 2:1 by volume		

\* Transportation: The material is stable during transportation at temperatures below 25°C (77°F) and 50% RH.

### TYPICAL PROPERTIES OF APPLIED FILM<sup>†</sup>

<u>TEST / REQUIREMENT</u>	<u>METHOD</u>	<u>CRITERIA</u>	<u>RESULT</u>
Pot Life	(100 gm mass)	@ 25°C (77°F)	30 minutes
Cured Hardness Shore D	ASTM D2240	(25°C/77°F)	88
Dry Hard Time		30 mils @ 25°C (77°F)	5 hours
Tensile Adhesion to Steel	ASTM D-4541-95 A4 (Self-Alignment Adhesion Tester Type IV)	(25°C / 77°F)	3995 PSI
Volume Solids	100%		
Touch @ 30 mils		@ 25°C (77°F)	60 minutes
Tack Free @ 30 mils		@ 25°C (77°F)	2 Hours
Cathodic Disbondment	CSA Z245.20-10' Clause 12.8	120°C/248°F, 28 Days 150°C/302°F, 28 Days	.7 mm 9.7 mm
Specific Gravity	ASTM D-792		Base: 1.60 ± 0.03 Hardener: 1.08 ± 0.02 Mixed: 1.48 ± 0.03 Mixed
Impact	CSA Z245.20-10, Clause 12.12	@ 21°C ± 3°C (70°F ± 5°F) @ 0°C ± 3°C (32°F ± 5°F) @ -30°C ± 3°C (-22°F ± 5°F)	Pass 1.5 Joules Pass 1.5 Joules Pass 1.5 Joules
Flexibility	CSA Z245.20-10, Clause 12.11	@ 21°C (70°F) @ 0°C (32°F)	Pass 1.74°/PD Pass 1.03°/PD



@ -30°C (-22°F) Pass 1.02°/PD

**Wet Adhesion** CSA Z245.20-10, 95°C/203°F, 28 Days Pass – Rating #1  
 Clause 12.14

1. Test modified using an autoclave
2. Test Pressure: 100 psi

**GENERAL APPLICATION PARAMETERS**

- First, degrease the surface by using a good, fast, evaporating degreaser. All oil, grease, and dirt must be removed before applying any epoxy material.
- To repair damages extended to the metal, the surface must be roughened ideally by grit blasting (8-40 mesh grit), or by grinding with a coarse wheel or abrasive disc pad. An abrasive disc may be used provided white metal is revealed. This creates increased surface area for better adhesion. 2.5 to 5 mil profile is desired for application. 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 g per square meter.

All prepared surfaces should be repaired as soon as possible, to eliminate any changes or surface contaminants.

**Surface Preparation**

Brush Grade	Brush or Roller
Film Thickness	35 to 45 mils
Cleanliness	Near White (Steel Substrate)
Standards	NACE 2, Sa 2½ (Swedish Scale, ISO 8501-1) SSPC SP-10 (Steel Structures Painting Council)
Profile	2.5 mils to 5.0 mils (62 microns to 125 microns)

**Temperature Parameters**

**DURING APPLICATION:** Substrate temperatures must be above 10°C (50°F) and at least 3°C (5°F) above the dew point. If the surface to be coated is below 10°C (50°F), preheating of the substrate is required (not to exceed 100°C / 212°F) prior to the application of 7-1854. Refer to the Time Vs. Temperature Chart.

<b>Re-Coat Interval</b>	@ 25°C (77°F)	Maximum: 4 Hours
	@ 100°C (212°F)	Maximum: 5 Minutes

If the maximum re-coat interval is exceeded, the surface must be blast roughened to a minimum surface profile of 2.5 mils. Small areas (250 sq. cm.) may be sanded using medium grit (80-100) carborundum cloth. Prior to the re-coat application of the coating, the surface must be wiped free of all dust using a clean dry cloth.

Always consult product Material Safety Data (MSDS) prior to handling.

**WARRANTY POLICY:** Axalta Powder Coating Systems USA, Inc. ("Seller") certifies that all coatings delivered to Customer in unopened factory filled containers meet all pertinent quality standards presented in Seller's 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 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.**





**CURE<sup>†</sup> SCHEDULE GUIDELINES**

Substrate Temperature		DRY HARD CURING TIME	
°C	°F	0.50 mm (20 mils) DFT per ASTM D1640	
		Spray Grade	Brush Grade
90	194	3.5 minutes	5 minutes
80	176	5 minutes	12 minutes
60	141	14 minutes	22 minutes
50	122	45 minutes	1 hour
40	104	1.75 hours	2 hours
30	86	3.5 hours	4.5 hours
20	68	7.5 hours	7.5 hours
10	50	16 hours	16 hours

Substrate: 12 mm (0.5 inch) Thick Steel Panels

Material Temperature: Brush Grade - Base: 15.5°C (60°F) to 100°C (212°F)  
 Hardener: 15.5°C (60°F) to 100°C (212°F)

Note: The information above is to serve as a guide only. The test results were compiled under laboratory-controlled conditions. Field results may vary due to variable conditions such as radiant heat loss and the cooling effects of wind.

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