



Nap-Gard®

7-2534

Riser Gray III

Revised: 7 October 2022

DESCRIPTION

NAP-GARD® Product No. 7-2534 is a thermosetting epoxy powder designed as a coating for underground pipeline service, or as a corrosion resistant coating for general industrial use. In buried service, the coating is capable of withstanding continuous operating temperatures of 107°C (225°F).

TYPICAL POWDER PROPERTIES

Color:	Gray	Theoretical Coverage:	132 Ft ² /lb/mil
Specific Gravity:	1.45 ± .05	Typical Gel Time:	25 ± 5 Sec.
Shelf Life*:	12 months	@ 205°C (401°F) CSA	
@ 25°C (77°F)			

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

TYPICAL PROPERTIES OF APPLIED FILM†

Recommended Film Thickness		Average	350µm (14 mils)
		Minimum	300µm (12 mils)
TEST / REQUIREMENT	METHOD	CRITERIA	RESULT
Hardness	ASTM D2583	Barcol	68 avg.
	ASTM D2240	Shore D	86 avg.
Bending	API-RP-5L7 CSA Z245.20-22	Passes all requirements 3.7"/pipe dia. @-30°C	Pass
Impact Resistance	ASTM G14	1/8" X 5" X 8" Steel Panels @25°C (77°F)	160 in. Lbs
	CSA Z245.20-22	> 1.5 J @-30°C (-22°F)	Pass
Adhesion	CSA Z245.20-22	75°C, 24 hours	Rating 1-2 - Pass
Cathodic Disbondment	CSA Z245.20-22	24 hrs, 3.5 volts, 3% NaCl, 65°C (149°F)	1.4 mm avg. radius

† Performance depends on film thickness. Consult Nap-Gard® Specialist for specific recommendations.

TYPICAL ELECTRICAL PROPERTIES OF FILM

TEST / REQUIREMENT	METHOD	CRITERIA	RESULT
Dielectric Strength	ASTM D149	@ 250µm (10 mils)	1500 volts/mil
Dielectric Constant	ASTM D150		2.15 @ 1 MHz
Breakdown Voltage	ASTM D149	@ 450µm (18 mils)	20K volts
Volume Resistivity	ASTM D257		3.3 x 10 ¹⁵ ohm-cm

GENERAL APPLICATION PARAMETERS

- Grit blast to NACE Near-White specifications (Swedish Standard #Sa2½) and profile between 50µm (2 mils) and 112µm (4.5 mils).
- Use phosphoric acid/deionized water rinse if water soluble salt contamination is suspected.
- Preheat pipe to approximately 239°C (463°F) or it can be sprayed cold applied then post-cured 5 minutes @ 204°C (400°F) metal temperature.
- Apply Nap-Gard® 7-2534 powder to meet customer thickness specifications.
- Follow recommended cure schedule (see below).
- Cure should be verified by DSC or other methods.
- Electrically inspect for holidays. Repair with Nap-Gard®7-1862.
- If girth welds are being coated, refer to Axalta's "Nap-Gard® Field Girth Weld Application Procedure".

CURE† SCHEDULE GUIDELINES

The cure profile and schedule for Nap-Gard® Product No. 7-2534 shows the minimum time at temperature required to achieve the typical performance properties of the coating. Because pipe cooling rates vary so widely with pipe wall thickness, no allowance has been made for heat loss from the pipe but this can be easily measured on the coating line and allowance made.

Recommended powder application temperature range is listed below and post heating is not a normal requirement. The minimum post application curing temperature (as measured on the coated pipe) and the time to quench shall conform to the following allowable cure schedule:

<u>Pipe Temperature</u>	<u>Minimum Time to Quench**</u>
226°C (438°F)	115 Seconds
232°C (450°F)	75 Seconds
239°C (463°F)	60 Seconds

****CAUTION**** Minimum quench time is based on the assumption that the listed temperature is maintained without any cool down rate. Therefore, the above information shall be used only as a guideline. Cure should be verified by TM or similar methods.

† Cure is by residual heat in the pipe, therefore very light wall pipe may require additional post heat to complete cure.

‡ Recommended time to quench is based on the assumption that the listed temperature is maintained without any cool down rate. Time to quench will vary with application parameters and pipe sizes. **Therefore, the above information shall be used only as a guideline by the applicator to develop proper time to quench. Cure should be verified by DSC or other methods. For three layer, the optimum time for adhesive application is between 30-70% cure of the FBE. This has to be developed by the applicator based on the plant layout.**

Always consult product Material Safety Data (SDS) 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.**