

# Nap-Gard<sup>®</sup>

# 7-0014

# **Multipurpose Fusion Bonded Epoxy**

Revised: 6 March 2014

### **DESCRIPTION**

Nap-Gard® 7-0014 is a thermosetting epoxy powder designed as a coating for both external and internal buried pipeline service. In particular, it is recommended for use on the inside of steel pipe which is in adverse temperature and pressure service and in contact with corrosive oils, gases and waters.

Nap-Gard<sup>®</sup> 7-0014 meets the requirements of AWWA standards C116, C213, C550 and CSA standard Z245.20-10. Nap-Gard<sup>®</sup> 7-0014 has been certified to ANSI/NSF standard 61, drinking water system components.

### TYPICAL POWDER PROPERTIES

Color:	Green	Theoretical Coverage:	130 Ft <sup>2</sup> /lb/mil
Specific Gravity:	1.48 ± .05	Density: CSA Z245.20-10 (Section 12.6.2.3)	1480 ± 50 g/L
<b>Typical Gel Time:</b> CSA Z245.20-10 @ 204°C (401°F)	105 ± 21 seconds	Shelf Life*: @ 25°C (77°F) @ 50% RH	12 months
TM # 10.210 @ 232°C (450°F)	65 ± 13 seconds		

<sup>\*</sup> 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	10 – 20 mils 15 mils
TEST / REQUIREMENT Impact Resistance	METHOD ASTM G-14	CRITERIA 1/4x4x4 panel @ 25°C 1/8x4x4 panel @ 25°C	RESULT 50 Lb / in Pass 120 Lb / in Pass
	CSA Z245.20-10, @-30°C (-22°F)	> 1.5 J	Pass
Hot Water Resistance	CSA Z245.20-10	75°C, 24 hr	Rating 1-2, Pass
Taber Abrasion	ASTM D4060 C17 wheels, 1 Kg	1000 Cycles 5000 Cycles	40 mg weight loss 134 mg weight loss
Cathodic Disbondment	CSA Z245.20-10 24 hr.,3.5 V., 65°C (150°F) 28 days,1.5 V.,23°C (77°F) Strained C.D.	2 - 4 mm radius 3 - 5 mm radius No Cracking	Pass Pass Pass
Shear Adhesion	ASTM D D1002	4677 psi	



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**Heat Distortion Resistance** CSA Z245.20-10,  $Tg_3 = 109.5$ °C (229°F)

Clause 12.7

**Penetration** ASTM G-17 (140°F/96hr) <4.0%

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

#### TYPICAL ELECTRICAL PROPERTIES OF FILM

**Dielectric Strength:** 1260 volts/mil **Volume Resistivity:** 1.16×10<sup>15</sup> ohm.cm

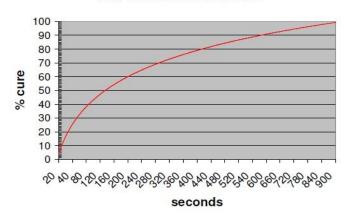
ASTM D149-97

ASTM D257 (23°C/50% RH)

#### **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 substrate to approximately 232°C (450°F) to 239°C (463°F)
- Apply Nap-Gard<sup>®</sup> 7-0014 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® 7-1677 or 7-1868, NSF approved SP-7888.
- If girth welds are being coated, refer to Axalta's "Nap-Gard® Field Girth Weld Application Procedure.

#### 200 ℃ cure data for 7-0014



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

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