DESCRIPTION

This superior thermoset system is designed to provide excellent damage resistance to pipelines in the toughest environments including river and road crossings and rocky, mountainous terrain. Excellent abrasion and impact resistance combined with good flexibility makes this product unique in providing protection against possible damage to corrosion base coat during pipe transportation, and pipe laying construction. 7-2610 series is offered in gray (7-2610) and brown (7-2610M).

This Dual Powder System consists of a thermoset topcoat, Nap-Gard® 7-2610 series, designed to be applied directly to one of the Nap-Gard® corrosion protection Fusion Bonded Epoxy Systems, 7-2500, 7-2501, 7-2508 Series, 7-2514EN Series.

TYPICAL POWDER PROPERTIES

<table>
<thead>
<tr>
<th>Color:</th>
<th>Gray (7-2610)</th>
<th>Theoretical Coverage:</th>
<th>122.5 Ft²/lb/mil</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Brown (7-2610M)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Gravity:</td>
<td>1.57± .05</td>
<td>Shelf Life*:</td>
<td>12 months</td>
</tr>
<tr>
<td>Density:</td>
<td>1570 ± 50 g/L</td>
<td>@ 25°C (77°F)</td>
<td></td>
</tr>
<tr>
<td>Typical Gel Time:</td>
<td>Standard Gel Version</td>
<td>10 ± 2 Seconds</td>
<td></td>
</tr>
<tr>
<td>@ 204°C (400°F)</td>
<td>Long Gel Version</td>
<td>26 ± 5 Seconds</td>
<td></td>
</tr>
<tr>
<td>CSA Z245.20-14 (Section 12.6.2.3)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* 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

This is selected based on the size and wall thickness of the pipe. Heavier film thickness required for more demanding environments such as road crossings. Consult Nap-Gard® Specialist for specific recommendations.

Base Coat

250μm (10 mils) Average
[This can vary from 200μm (8 mils) to 500μm (20 mils)]

Top Coat – 7-2610 series

375μm (15 mils) Average
[This can vary from 300μm (12 mils) to 875μm (35 mils)]

TEST / REQUIREMENT

<table>
<thead>
<tr>
<th>Impact Resistance</th>
<th>METHOD</th>
<th>CRITERIA</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CSA Z245.20-14</td>
<td>@-30°C (-22°F)</td>
<td>9.5J @ 38 mils</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bending</td>
<td>CSA Z245.20-14</td>
<td>@ 0°C (32°F)</td>
<td>4.5°/pipe dia.</td>
</tr>
<tr>
<td></td>
<td>CSA Z245.20-14</td>
<td>@ -30°C (-22°F)</td>
<td>3.7°/pipe dia.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(at 40 mils total)</td>
<td>(at 45 mils total)</td>
</tr>
</tbody>
</table>
Tg of Cured Film
- By DSC-CSA Z245.20-14 (Tgs):
  - 110 ± 6°C
- By DMA:
  - 118°C

Taber Abrasion
- ASTM D4060
  - C17 wheel, 1 Kg, 5000 Cycles
  - 55 mg removal

Compressive Strength
- ASTM D695-97
  - >10,000 psi

Tensile Strength
- ASTM D2370
  - Strength at break 6470 psi

Elongation
- ASTM D2370
  - 4.9%

Cathodic Disbondment
- CSA Z245.20-14
  - 3 – 5 mm radial Disbondment
  - Pass
  - 2 – 3 mm radial Disbondment
  - Pass

Water/Soak Adhesion
- CSA Z245.20-14
  - Rating of 1
  - Pass
  - Rating of 1
  - Pass

Gouge Resistance (Partech Test)
- CSA Z245.20-14
  - @ 1300µm (52 mils) total, 23°C
    - 50 kg weight, gouge depth 14 mils
    - Pass, no holidays
  - SL-1 Smooth Bit
    - 75 kg weight, gouge depth 34 mils
    - Pass, no holidays

Thermal Conductivity
- ASTM C177
  - 0.23 ± 0.02 BTU/hr./ft²/°F
  - Pass

Shear Adhesion
- ASTM D1002-94
  - Average
  - 5363 psi

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

TYPICAL ELECTRICAL PROPERTIES OF FILM

- Dielectric Strength
  - ASTM D149-97
    - 1000 volts/mil

- Breakdown Voltage
  - ASTM D149-97
    - >20000 volts @ 650µm (26mils) total

- Dielectric Constant
  - ASTM D150
    - 4.04 @ 1 MHz

- Volume Resistivity
  - ASTM D257
    - 1.26 x 10^{15} ohm-cm

GENERAL APPLICATION PARAMETERS

- Base coat must be at or above 218°C (425°F) to apply 7-2610 series. The use of a separate reclaim system is recommended.
- Apply Nap-Gard® base coat followed by Nap-Gard® 7-2610 series using electrostatic spray or flocking application.
- Water quench after allowing sufficient time for proper cure. For line pipe, apply 7-2610 series in-line before base coat has cured.
- 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 or 7-1861.
- If girth welds are being coated, refer per Axalta’s “Nap-Gard® Field Girth Weld Application Procedure”.

Always consult product Material Safety Data Sheet (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 it 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 SCHEDULE GUIDELINES

The minimum post application curing temperature (as measured on the pipe) shall conform to the cure schedule of the base coat. (Refer to Nap-Gard® 7-2500, 7-2501, 7-2508 Series, 7-2514EN Series technical data sheets). However, a minimum 90 seconds at 218°C (425°F) or higher is needed for proper cure.

**CAUTION**: Recommended quench time is based on the assumption that the listed temperature is maintained without any cool down rate. Quench time 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 quench time. Cure should be verified by DSC or other methods. 90 second minimum quench time is for nominal thickness; 180 seconds of quench time may be needed for film thickness over 50 mils.