



NHT-6100™ Two-Part Epoxy Pipeline Coating

DESCRIPTION:

NHT-6100™ is a 100% solid, VOC free epoxy coating designed to work with higher temperature applications up to 350°F (177°C) intermittent service.

USES:

High temperature protection of pipeline field joint girth welds, valves, fittings, as a holiday repair material on FBE coated pipe, and for pipeline coating rehabilitation.

ADVANTAGES:

- Excellent high temperature cathodic disbondment resistance tested to a temperature of 356°F (180°C)
- Fast touch, dry, and cure times
- Excellent adhesion characteristics
- Environmentally friendly
- Excellent abrasion and impact resistance
- Isocyanate free
- High build (up to 40 mils in a single coat)
- Excellent chemical resistance

APPLICATION:

- **NHT-6100™** must be applied to clean dry surface only.
- Ambient conditions for successful application include: relative humidity less than 85%; and temperature greater than 5°F (3°C) above the dew point.
- Application temperature range is 50°F (10°C) to 185°F (85°C).
- If substrate temperature is below 50°F (10°C), preheating is required to achieve cure.
- Base and hardener material should be kept warm, minimum 65°F (18°C) to mix easily.
- Stir the individual base and hardener components separately until they are a uniform consistency. Add the hardener into the base and continue to stir the mixture until an even color is achieved and make sure all the material is scraped from the sides of the containers.
- Apply thoroughly mixed epoxy by brush, roller, or other approved method.

Typical properties of the **NHT-6100™** are:

| Property | Typical Results |
|---|---|
| Solids Content | 100% |
| Base (unmixed) @ 77°F (25°C) Specific Gravity Viscosity (75°F, Spindle #7, 10 RPM) Color | 1.632 10,200 cps White |
| Hardener (unmixed) @ 77°F (25°C) Specific Gravity Viscosity (75°F, Spindle #7, 10 RPM) Color | 1.046 12,000 cps Red |
| Mixed Material Specific Gravity Viscosity (75°F, Spindle #7, 10 RPM) Color | 1.48 40,000 cps Red |
| Mix Ratio (by volume) | 3 Parts Base : 1 Part Hardener |
| Cathodic Disbondment Testing ASTM G95 (28 days @ 77°F (25°C)) CSA Z245.20-10 (28 days @ 356°F (180°C)) | 3.0 mm 3.4 mm |
| Hardness (Shore D) | 85 +/- 2 |
| Impact Resistance (ASTM G14) | 60 Inch-Pounds (6.78 Joules) |
| Adhesion (ASTM D4541) | ≥3200 psi |
| Corrosion Resistance (ASTM B117) | >500 hours @ 40 mils |
| Recommended Maximum Service Temperature | 300°F (149°C) with intermittent ≤ 350°F (177°C) |
| Holiday Detection (based on minimum specified mil thickness) | 125 volts/mil |
| Theoretical Coverage | 14 ft ² per liter @ 30 mils |
| Recommended Thickness | 30 – 60 mils |
| Surface Preparation Standard Profile | Near White NACE 2, SSPC SP-10 2.5 mils to 5 mils (62.5 microns to 127 microns) |
| Recoat Window @ 77°F (25°C) | Less than 2 hours |
| Cure Times Pot Life @ 77°F (25°C) Pot Life @ 97°F (36°C) Handling Time @ 77°F (25°C) Handling Time @ 97°F (36°C) | 30 – 40 minutes 15 – 25 minutes 3 hours 1 hour |

PRECAUTIONS:

This material is sold by **Polyguard Products, Inc.** only for the purposes described in this literature. Any other use of the products is the responsibility of the purchaser and **Polyguard Products** does not warrant nor will be responsible for any misuse of these products. **Polyguard Products** will replace material not meeting our published specifications within one year from date of sale.

HEALTH AND SAFETY:

All **Polyguard Products** Safety Data Sheets (SDS) and precautionary labels should be read and understood by all user supervisory personnel and employees before using. Purchaser is responsible for complying with all applicable federal, state or local laws and regulations covering use, health, safety, and disposal of the product.