

# Polyken # 1600-HT

**High Temperature Coating System** 



### Market

Oil, Gas or Water pipelines Pipeline Rehabilitation

# **Applications**

Girthwelds for Water, Oil or Gas pipelines

### **Temperature Range**

up to 250°F (121°C)

### **System Description**

1600-HT Polyken system is designed for the corrosion protection of new and existing pipelines with a maximum operating temperature of 250°F (121°C).

The products can be used for both buried and above ground applications, and the product is suitable to resist UV irradiation. The coating layer consists of a cross-linked polyethylene backing and a cross-linked elastomeric adhesive capable of maintaining

long-term protection at elevated temperature. The 1600 HT has a release liner to enable proper unwinding of the roll.

### **Product Advantages**

- Proven cross-linked backing formulation for long term temperature resistance and flexibility up to 248°F (120°C) Long-lasting performance.
- · User-friendly application to new or operating pipelines Save time and Money.
- Manufactured at ISO certified **Facility**

Reliability and Safety.

### Shear Resistance at elevated temperature

Provides high functional performance and

- High operating temperature rating Top performance in demanding conditions.
- Plant or in-field application Flexible and conformable backing for easy plant or field application.

### **System Components**

- Primer layer #1619 Percent solids: 20 Wt/ga: 7.4 lbs Flash point: 45°F (7°C)
- #1619

Thickness: 25 and 30 mils (0.635 and 0.762 mm)

Tensile strength: 40 lbs/in (7N/10mm) Elongation: 500%

### **Product Construction**

Backing

Backing Color

Adhesive

1600-25HT 1600-30HT 10 mils (0.25 mm) 10 mils (0.25 mm) Black or grey Black or grey 15 mils (0.38 mm) 20 mils (0.50 mm) DS-1600-HT-REV2-APR12-AARPS-0166

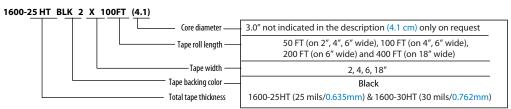
# DS-1600-HT-REV2-APR12-AARPS-0166

### **Product Properties - 50 mil System**

	Test Method	Typical Value	
		English	Metric
Peel Adhesion to pipe	ASTM D1000 @ 23°C	24 lbs/in.	42 N/ 10 mm
Peel Adhesion to backing	ASTM D1000 @ 23°C	10.4 lbs/in.	18.2 N/ 10 mm
Shear Adhesion to Pipe	Modified Aleyeskay method 85°C 121°C	0.0014 in/hr. 0.0002 in/hr.	1 x 10 <sup>-8</sup> m/sec 1.3 x 10 <sup>-9</sup> m/sec
Cathodic Disbondment	ASTM G8	0.4 in. radius	10 mm radius
Water Vapor Transmission Rate	ASTM E398 (100°F, 100% RH)	<0.01g/100 in.2/24hr	<0.1g/m²/ 24hr
Impact Resistance	ASTM G14	27 in. lb	3.1 Joules
Penetration resistance	ASTM G17 21°C 121°C	40% 53%	40% 53%
Volume resistivity	ASTM D257	10 <sup>15</sup> ohm•cm	10 <sup>15</sup> ohm•cm
Dielectrical strength	ASTM D149	40 kV	40 kV
Temperature range	Normal in-ground service	-30° to 250°F*	+34° to 121°C
* contact a Berry Plastics representative for	specific project recommendations		

## **Ordering Information**

Polyken 1600-25HT and -30HT are available in roll form.



For other ordering options please contact your Berry Plastics representative.

### **Equation for Pipe Coating Requirements**

(Width of Coating in inches) x (Area of pipe in square feet)\*

= Squares\*\* of Coating Required
(Width of Coating in inches – Overlap in inches) x100

- \* Area of pipe in square feet = (Diameter in inches) / 12 x 3.1416 x (Length in ft)
- \*\* One Square = One hundred square feet = 9.29 square meters

(Width of Coating in mm) x (Area of pipe in square meter)\*

= Square meters of Coating Required

(Width of Coating in mm - Overlap in mm)

\*Area of pipe in square meter = (Diameter in mm)  $/1000 \times 3.1416 \times (Length in meter)$ 



**CORROSION PROTECTION GROUP** 

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