

HBE-95

High Build Epoxy coating for pipelines

The Canusa HBE-95 is an advanced two-component epoxy coating system which has been specifically formulated for moderate temperature pipelines. Applied to bare steel, HBE-95 has proven to withstand operating temperatures up to 95°C (203°F) with superior performance. HBE-95 is used for protection of field joint girth welds, valves and fittings, as a holiday repair material on FBE coated pipe or for rehabilitation projects. This environmentally friendly, 100% solids, novolac epoxy system can either be spray applied or brush applied to the intended substrate.



Corrosion Protection up to 95°C

- HBE-95 coating system was designed to protect operating pipelines up to 95°C with exceptional performance.

Exceeds FBE Performance Requirements

- Exceeds FBE coating performance requirements, including impact resistance, hot water soak adhesion and resistance to cathodic disbonding, as specified in USA (NACE RP0394), British (CW6), and Canadian (CSA Z245.20) standards.

Fast, Medium and Slow Cure Options

- HBE-95 brush grade comes with three different cure speed options: Fast, Medium and Slow. Cure speed options present pot-life flexibility based on ambient temperatures and cycle time requirements.

High Build in Single Coat

- A single pass application direct-to-metal will achieve a high build coating thickness of 20-40mils (500-1000microns).

Variety of Uses

- Mainline pipelines, rehabilitation projects, girth weld field joints, damage and holiday repair to FBE coated pipe, pipeline valves, fittings and bends, or directional drilling applications.

Applications



Oil & Gas



Repair & Rehab



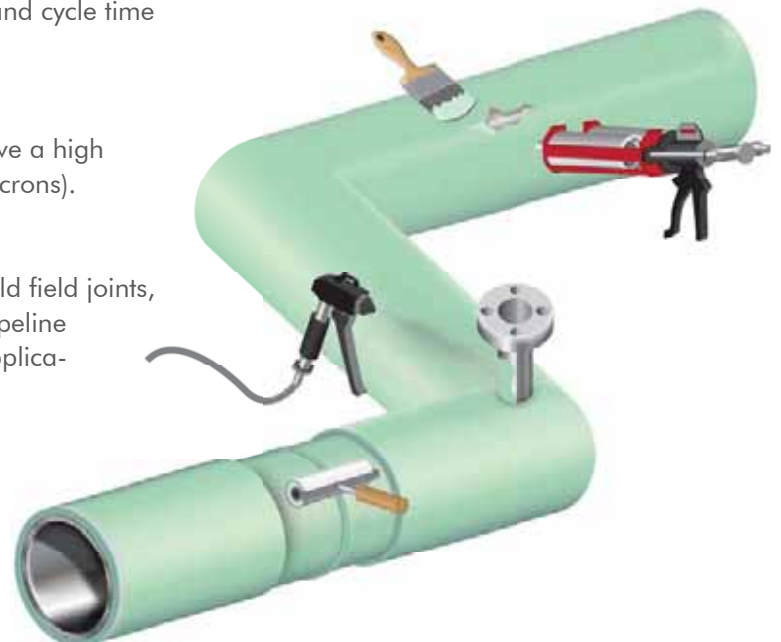
Abrasion Coating



Girth-Weld Joints



Fittings & Bends



HBE-95

High Build Epoxy coating for pipelines

Performance	All performance testing followed CSA-Z245.20-10 unless specified.
Service Temp.	Up to 95°C (203°F)
Typical Thickness	> 20 mils (500 microns)
Mixing Ratio	3:1 (by volume)
Percent Solids	100%
Specific Gravity	Base: 1.49 Cure: 1.048
Hardness (ASTM D2240)	> 85 Shore D
Adhesion to Steel	> 2300 psi
Adhesion to FBE	> 2000 psi
Cathodic Disbondment @ 28 days, 23°C	< 3 mm
Cathodic Disbondment @ 28 days, 80°C	< 8 mm
Cathodic Disbondment @ 28 days, 95°C	< 8 mm
Impact Resistance @ -30°C	> 3.0 J
Impact Resistance @ 25°C	> 3.0 J
Hot Water Immersion @ 28 days, 75°C	Rating 1
Hot Water Immersion @ 28 day, 95°C	Rating 1
Water Absorption (ASTM D570)	< 0.1 %
Chemical Resistance (ASTM D543)	Excellent in various pH solutions
Shelf Life	3 years when stored in original packaging between 5°C and 40°C.
Cure Speed Options ¹	
SuperFast Cure ²	Gel Time = Forced Cure
Fast Cure	Gel Time = < 10 minutes
Medium Cure	Gel Time = < 15 minutes
Slow Cure	Gel Time = < 20 minutes
Typical Kit Size Required by Pipe Diameter ³	
4.5" – 16"	0.5 Liter Kit
18" – 32"	1.0 Liter Kit
34" to 50"	1.5 Liter Kit

¹ Gel times were measured @ 23°C (73°F). For more information please refer to Canusa's Technical Bulletin – High Build Epoxy Cure Profiles.

² SuperFast Technology (SFT) is used as repair material in FBE coating plants.

³ Based on 400 mm coating width, 25 mils (635 micron) average thickness and 50% wastage factor.

Safety

Handle with care. Before and during use, observe all safety labels on packaging containers, consult with Canusa-CPS Material Safety Data Sheets and abide by all local or national safety regulations.

Since 1967, Canusa-CPS has been a leading developer and manufacturer of specialty pipeline coatings for the sealing and corrosion protection of pipeline joints and other substrates. Canusa-CPS high performance products are manufactured to the highest quality standards and are available in a number of configurations to accommodate many specific project applications.

The product information shown here is intended as a guide for standard products.

Consult your Canusa representative for specific projects or unique applications.



Canusa-CPS A division of ShawCor Ltd.

Head Office

25 Bethridge Rd.
Toronto, ON M9W 1M7 Canada
Tel: +1 416 743 7111
Fax: +1 416 743 5927

Canada

Suite 3200, 450 - 1st Street S.W.
Calgary, AB T2P 5H1 Canada
Tel: +1 403 218 8207
Fax: +1 403 264 3649

Americas

2408 Timberloch Place, Building C-8
The Woodlands, TX 77380 USA
Tel: +1 281 367 8866
Fax: +1 281 367 4304

Europe, Middle East, Africa & Russia

Unit 3, Sterling Park,
Gatwick Road, Crawley, West Sussex
RH10 9QT United Kingdom
Tel: +44 1293 541254
Fax: +44 1293 541777

Asia-Pacific

101 Thomson Road,
#11-03 United Square
307591 Singapore
Tel: +65 6749 8918
Fax: +65 6749 8919

Canusa-CPS is registered to ISO 9001:2008

Canusa warrants that the product conforms to its chemical and physical description and is appropriate for the use stated on the product data sheet when used in compliance with Canusa's written instructions. Since many installation factors are beyond our control, the user shall determine the suitability of the products for the intended use and assume all risks and liabilities in connection therewith. Canusa's liability is stated in the standard terms and conditions of sale. Canusa makes no other warranty either expressed or implied. All information contained in this data sheet is to be used as a guide and is subject to change without notice. This data sheet supersedes all previous data sheets on this product. E&OE

PDS_HBE-95_rev023