

HBE-DX

High Build Epoxy coating with Abrasion and Corrosion Resistance

The Canusa HBE-DX is a robust liquid epoxy coating system specifically designed to protect field joint girth welds during directional drilling pipeline construction. The formulation presents high properties of gouge resistance, tensile elongation, impact strength and ease of build. Applied as a standalone direct-to-steel coating system, HBE-DX has proven to withstand pipe operating temperatures up to 95°C (203°F) with excellent anticorrosion performance. This environmentally friendly, 100% solids, novolac epoxy system can either be spray applied or brush applied to the intended substrate.

Directional Drill Compatibility

- High gouge resistance, tensile elongation, impact resistance and flexibility are the major performance characteristics worked into the HBE-DX formulation.

Corrosion Protection up to 95°C

- HBE-DX coating system was designed to protect operating pipelines up to 95°C.

Superior Performance

- HBE-DX has proven to outperform competitive equivalents in a variety of test methods for corrosion and mechanical resistance.

Fast Cure

- HBE-DX's cure component comes standard with Canusa's proprietary Fast Cure option.

High Build in Single Coat

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



Applications



Oil & Gas



Water Pipelines



Abrasion Coating



Repair & Rehab



Girth-Weld Joints



HBE-DX

High Build Epoxy coating with Abrasion and Corrosion Resistance

Performance	All performance testing followed CSA-Z245.20-10 unless specified.
Service Temp.	Up to 95°C (203°F)
Typical Thickness	> 40 mils (1016 microns)
Mixing Ratio	3:1 (by volume)
Percent Solids	100%
Specific Gravity	Base: 1.49 Cure: 1.05
Hardness (ASTM D2240)	> 85 Shore D
Adhesion to Steel	> 3000 psi
Adhesion to FBE	> 2000 psi
Cathodic Disbondment @ 28 days, 23°C	< 4 mm
Cathodic Disbondment @ 28 days, 95°C	< 10 mm
Impact Resistance @ 20°C	> 4.0 J
Impact Resistance @ 85°C	> 4.0 J
Hot Water Immersion @ 28 days, 95°C	Rating 1
Gouge Resistance @ 52.6 kg, 20°C to 85°C	< 15% coating thickness
Abrasion Resistance (ASTM D4060)	> 1200 cycles/mil
Tensile Elongation at Break (ASTM D638)	> 1.50%
Flexibility at 20°C	> 1.0°/pd
Water Absorption (ASTM D570)	< 0.1%
Dielectric Strength (ASTM D149)	> 16 V/um
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	
Fast Cure	Gel Time = < 10 minutes
Typical Kit Size Required by Pipe Diameter ²	
4" – 12"	0.5 Liter Kit
14" – 22"	1.0 Liter Kit
24" to 32"	1.5 Liter Kit

¹Gel times were measured @ 23°C (73°F). For more information please refer to Canusa's Technical Bulletin – High Build Epoxy Cure Profiles.
²Based on 400 mm coating width, 40 mils (1016 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 Road
Toronto, ON, Canada M9W 1M7
Tel: +1 416 743 7111
Fax: +1 416 743 5927

Canada

Dome Tower St. 2200, 333-7th Avenue SW
Calgary, AB, Canada T2P 2Z1
Tel: +1 403 218 8207
Fax: +1 403 264 3649

Americas

5875 N. Sam Houston Pkwy W., Suite 200
Houston, TX, USA 77086
Tel: +1 281 886 2350
Fax: +1 281 886 2353

Middle East

Plot # 37-WR43, Sector no.: ICAD III
Musaffah South, PO Box 2621
Abu Dhabi, The United Arab Emirates
Tel: +971 2 204 9800

Europe, Africa & Russia

Dellaertweg 9-E, Gebouw "Le Carrefour"
2316 WZ Leiden, The Netherlands (NL)
Tel: +31 71 80 802 70
Fax: +31 71 80 802 71

Asia-Pacific

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

Quality Management system registered to ISO 9001

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-DX_rev017