

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



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| 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 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

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