



BOLPHANE R³

**RENEW
REDUCE
RECYCLE**

BTTX 110

Ultrathin display shrinkfilm on the basis of bi-oriented polyethylene (BO-PE) impact strength

- Broad operating window allowing use on a wide range of equipment
- Same mechanical properties as a conventional 15µm film
- Superior impact strength
- High seal strength
- Excellent cohesion strength



BTTX 110 benefits from a crosslinking process specific to Bolloré and is formulated with high-tech resins. Thickness can thus be reduced while qualitative mechanical properties are preserved.

The result is a film of great adaptability, suitable to a wide range of product applications.

Disposal

Options for disposal are **recycling** (compatible with SPI code 4/PE-LD), incineration with energy recovery and landfill. Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/provincial and local regulations.

Food contact

Complies with EU and US regulations on food contact materials. See the « Declaration of Conformity » of concerned film reference for details.

Film storage

The maximum temperature for storage is 32° C, with a maximum of 80% RH, up to one year.



BOLLORE
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BTTX 110 Technical Specifications

Technical properties	Test unit	Test Method	Values	
Reference			BTTX110	
Presentation				
Grade			110	
Roll Length- Singlewound	m		4 000	
Roll Length- Centerfolded	m		2 000	
Width - singlewound (S)	mm	mini : 150 - maxi : 1 400 - increment : 5		
Width - centerfolded (C)	mm	mini : 150 - maxi : 900 - increment : 50		
Friction coefficients (film to film)				
Static		ASTM D1894	0.25	
Dynamic		ASTM D1894	0.16	
Optical properties				
Haze	%	ASTM D1003-A	3.5	
Gloss at 20°		ASTM D2457	115	
Shrinkage properties			LD*	TD*
Free shrink at 93°	%	ASTM D2732	15	15
Free shrink at 120°	%	ASTM D2732	73	73
Shrink force	kg/cm ²	NFT 54-125	26	31
Mechanical properties			LD*	TD*
Stiffness modulus	Mpa	ASTM D882	400	400
Elongation at break	%	ASTM D882	110	120
Tensile strength	Kg/cm ²	ASTM D882	1 400	1 500
Barrier properties				
Water vapor transmission rate	g/m ² /24h 38°C, 95% HR	ASTM E96	29	
Oxygen transmission rate	cm ³ /m ² /24h 23°C, 0% HR	ASTM D3985	17 500	

* LD = Longitudinal Direction

* TD = Transversal Direction

Characteristics are those of a non-perforated film.

BTTX 110 is pre-perforated in the centerfolded version (BTTX 110 HC).



The technical features of the products defined herein are given as typical values. They are the best information available to us and we believe them to be reliable. Users have to check-up that they are suitable with all the applications as performance may vary with processing conditions. Unless previous warning, BOLLORÉ has the right to change at any time the definition and technical features of its products.