



# BOLPHANE R<sup>3</sup>

**RENEW  
REDUCE  
RECYCLE**

**BTT+  
90 - 125**

Ultrathin display shrinkfilm on the basis of bi-oriented polyethylene (BO-PE) outstanding yield

- Outstanding shrinkage and fast sealing at low temperature
- Hot slip properties
- Enhanced stiffness to optimise the passage on high speed machines
- Increased optical quality for optimum shelf presentation

**BTT+90** and **BTT+125** are designed to offer high performance packaging on high speed machines. They are ideal for wrapping multimedia products, printing and stationery items such as giftwrap rolls.

Exceptional shrink characteristics make them the most adapted film for packing irregularly shaped items.



## 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**

**INNOVATIVE  
PACKAGING SHRINK FILMS**

Odet-Ergué-Gabéric  
29556 Quimper Cedex 9 - France  
Tél. +33 (0)2 98 66 72 00  
Fax +33 (0)2 98 59 67 79  
contact.packaging@bollore-technologies.fr



[www.bollorefilms.com](http://www.bollorefilms.com)

## BTT+ 90 - 125 Technical Specifications

Technical properties	Test unit	Test method	Values			
<b>Reference</b>			<b>BTT+90</b>		<b>BTT+125</b>	
<b>Presentation</b>						
Grade			90		125	
Roll Length- Singlewound	m		4 600		3 500	
Roll Length- Centerfolded	m		2 300		1 750	
Width - singlewound (S)	mm		mini : 150 - maxi : 1 400 - increment : 5			
Width - centerfolded (C)	mm		mini : 150 - maxi : 1 000 - increment : 50			
<b>Friction coefficients ( film to film)</b>						
Static		ASTM D1894	0.25		0.23	
Dynamic		ASTM D1894	0.16		0.16	
<b>Optical properties</b>						
Haze	%	ASTM D1003-A	3		3	
Gloss at 20°		ASTM D2457	114		114	
<b>Shrinkage properties</b>						
			<b>LD*</b>	<b>TD*</b>	<b>LD*</b>	<b>TD*</b>
Free shrink at 93°	%	ASTM D2732	40	40	30	38
Free shrink at 120°	%	ASTM D2732	70	68	66	67
Shrink force	Kg/cm <sup>2</sup>	NFT 54-125	28	30	27	28
<b>Mechanical properties</b>						
			<b>LD*</b>	<b>TD*</b>	<b>LD*</b>	<b>TD*</b>
Stiffness modulus	Mpa	ASTM D882	500	550	550	600
Elongation at break	%	ASTM D882	95	100	100	110
Tensile strength	Kg/cm <sup>2</sup>	ASTM D882	1 150	1 100	1 150	1 100
<b>Barrier properties</b>						
Water vapor transmission rate	g/m <sup>2</sup> /24h 38°C, 95% HR	ASTM E96	48		37	
Oxygen transmission rate	cm <sup>3</sup> /m <sup>2</sup> /24h 23°C, 0% HR	ASTM D3985	16 700		13 000	

\* LD = Longitudinal Direction

\* TD = Transversal Direction

Characteristics are those of a non-perforated film



**BTT+ 90** is pre-perforated in its standard centerfolded version (BTT+90 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.