



BOLPHANE R³

**RENEW
REDUCE
RECYCLE**

BE

Ultrathin display shrinkfilm on the basis of bi-oriented polyethylene (BO-PE) standard multipurpose

- Versatility
- Optimised pre-perforation for controlled shrinkage and easier set-up
- High cohesion strength
- Good optical properties



BE is a standard film that covers a broad spectrum of end-uses where a centerfolded film is required.

Its cohesion strength makes it a good candidate for multipacking applications.

The optimised pre-perforation facilitates the shrinking phase and makes set-up easier.

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

BE Technical Specifications

Technical properties	Test unit	Test Method	Values							
References			BE13C	BE15C	BE19C	BE25C				
Presentation										
Grade			13	15	19	25				
Roll Length - centerfolded (C)	m		1 550	1 335	1 070	800				
Width - centerfolded (C)	mm		mini : 150 - maxi : 700 - increment : 50							
Friction coefficients (film to film)										
Static		ASTMD1894	0.32	0.35	0.35	0.32				
Dynamic		ASTMD1894	0.23	0.25	0.27	0.23				
Optical properties										
Haze	%	ASTMD1003-A	4	4	4.2	4.2				
Gloss at 20°		ASTMD2457	100	100	100	100				
Shrinkage properties										
			LD*	TD*	LD*	TD*	LD*	TD*	LD*	TD*
Free shrink at 93°	%	ASTMD2732	17	23	17	23	15	21	12	20
Free shrink at 120°	%	ASTMD2732	60	59	58	59	54	59	50	50
Shrink force	Kg/cm ²	NFT 54-125	26	32	27	35	20	31	24	35
Mechanical properties										
			LD*	TD*	LD*	TD*	LD*	TD*	LD*	TD*
Stiffness modulus	Mpa	ASTMD882	590	690	590	690	590	690	590	690
Elongation at break	%	ASTMD882	90	100	90	100	100	100	105	100
Tensile strength	Kg/cm ²	ASTMD882	1 400	1 400	1 400	1 400	1 300	1 300	1 300	1 300
Barrier properties										
Water vapour transmission rate	g/m ² /24h 38°C, 95% RH	ASTM E96	21	19	16	12				
Oxygen transmission rate	cm ³ /m ² /24h 23°C, 0% RH	ASTMD3985	9 400	8 000	7 100	5 400				

* LD = Longitudinal Direction

TD = Transversal Direction

Characteristics are those of a non-perforated film.

BE is pre-perforated in its standard version and only available centerfolded (BE C).



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.