

Cryovac®  
CT-303E

High  
Performance  
Micro-Layered  
Shrink Films



The Cryovac® CT-303E is a revolutionary micro-layered shrink film. This polyolefin shrink film creates value for our customers in addition to an optimised total resource efficiency and minimal environmental impact.

#### INCREASED CUSTOMER VALUE AND BENEFITS

- Up to 50% reduction in number of roll changeovers resulting in increased up-time
- Higher productivity
- Excellent optics, highest clarity and lowest haze for improved retail appeal

#### THE SUSTAINABLE CHOICE

- Up to 50% packaging weight reduction
- Significant source reduction results in lower tunnel temperatures
- Reduced number of cores, cartons and pallets

Film Data	Unit	Typical Values		Test Method
Thickness	μ	11		ASTM D6988
Yield	m <sup>2</sup> /kg	92		
Length Centre Folded	lm	1905		
Width Centre Folded (50 mm increment)	mm	From 155 to 905		
Core diameter	mm	76		
Mechanical		LD*	TD*	
Tensile strength	kg/cm <sup>2</sup>	1250	1350	ASTM D882-95
Elongation at break	%	90	110	ASTM D882-95
Modulus of elasticity	kg/cm <sup>2</sup>	5400	5600	ASTM D882-95
Tear propagation	g	3.3	5	ASTM D1938
Kinetic coeff. of friction	(film-to-film, kinetic)	0.14		ASTM D1894
Puncture resistance	g	2100		COV-E-236
Shrink and Barrier				
Free shrink @ 120°C	%	65	65	ASTM D2732
Max. shrink tension	kg/cm <sup>2</sup>	29	35	COV-E-302
Moisture vapour transmission rate	g/m <sup>2</sup> /24hrs @ 38°C	37		ASTM F1249
Oxygen transmission rate	cm <sup>3</sup> /m <sup>2</sup> /24hrs @23°C, 1 atm	13000		D3985-95
CO2 transmission rate	cm <sup>3</sup> /m <sup>2</sup> /24hrs @23°C, 1 atm	50700		ASTM D1434
Optical				
Haze	%	3		ASTM D1003
Gloss	gloss units (i = 60°)	133		ASTM D2457
Storage Conditions	Recommended conditions for long-term storage: Below 32°C, max RH 80%, for up to one year			
Food Law Approval	Complies with EU regulations on food contact materials. See "Product Regulatory Compliance Statement" for details.			
Quality	All Cryovac manufacturing operations in Europe have received or are applying for ISO 9001:2008 Quality Certification or its local equivalent			

LD = Longitudinal Direction / TD = Transverse Direction



WORLDSTAR  
WINNER  
2013-2014



\*Cryovac is a registered trademark of Cryovac Inc., a subsidiary of Sealed Air Corporation

All statements or recommendations are based on data and knowledge considered to be true and accurate at the time of printing but should be verified by the user. Since the conditions of use are beyond our control we do not warrant: the completeness of any statement or recommendation, or as regards the goods or services supplied by us, the suitability for any intended purpose or the results to be obtained. Please read all statements or recommendations in conjunction with our conditions of sale including those limiting warranties and remedies which apply to all goods and services supplied by us. No statement or recommendation is intended for any use, which would violate or infringe statutory obligations or rights belonging to third parties.