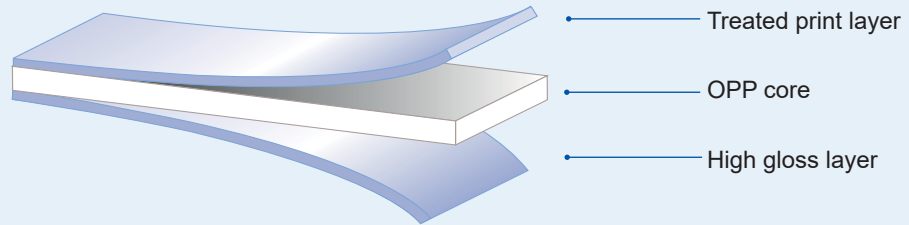


# RayoWrap™ LLD

## Technical Data Sheet

LLD - Transparent, one-side treated coextruded OPP film

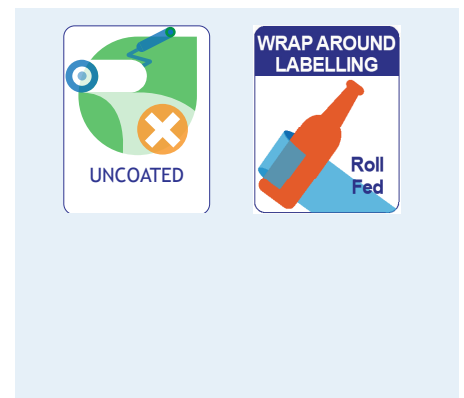


### Features

- UV print an adhesive receptive
- Superior hot melt adhesion
- Excellent lamination bond strength
- Good clarity and gloss
- Consistent COF and web flatness

### Application

- Roll-fed wrap-around labels for beverages
- “No label look”
- UV print processes
- Laminate to LLH or LQH



### Technical Properties (Typical Values)

Property	Test Method	Test Conditions	Units	LLD15	LLD17	LLD25	
Thickness	ASTM D 4321		micron	15	17	25	
			gauge	60	70	100	
Yield	ASTM D 4321		in <sup>2</sup> /lb	51600	44200	30900	
			m <sup>2</sup> /kg	73.3	62.8	43.9	
Basis Weight	ASTM D 4321		g/m <sup>2</sup>	13.7	15.9	22.8	
			lbs/ream	8.4	9.8	14.0	
Nominal Density	Innovia test method		g/cm <sup>2</sup>	0.91	0.91	0.91	
Surface tension	ASTM D 2578	Print	mN/m (dyne)	36-39	36-39	36-39	
Gloss			[20%]	125	125	125	
Haze	ASTM D 1003	Gardner		2.3	2.3	2.3	
Tensile Strength	Innovia test method		KPSi	MD	20.3	20.3	20.3
				TD	49.3	49.9	49.9
Elongation at break	Innovia test method		%	MD	180	180	180
				TD	50	50	50
Coefficient of Friction	ASTM D 1894			0.23	0.23	0.23	

MD Machine Direction TD Transverse Direction  
 All properties are tested under standard laboratory conditions: 73 ± 4F, 50 ± 5% RH (23 ± 2°C, 50 ± 5% RH) unless otherwise stated. Where relevant, tests are based on international standards.  
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 RayoWrap™ LLD – 1 of 2 – 1019

# RayoWrap™ LLD

## Technical Data Sheet

### Conversion

Treatment and Winding	Surface Printing
One surface treated for printing and/or laminating	Ink recommendations for all print processes are available
Treated surface wound to outside of roll	Printing and anti-static properties guaranteed for 6 months only
See roll about treatment specific to roll	Excellent web flatness permits higher speed printing
	Run appropriate trials prior to production
	Consult your ink, coating and adhesive suppliers

#### Conversion Note -

Where static electricity may be generated, use of static eliminators and maintaining a relative humidity >50% is recommended. Usually laminated to Innovia Films' transparent, metallised or opaque films. Film is suitable for solvent-based, solvent-less and UV adhesive laminations.

### Nominal Reel Diameters

Film	Length (metres)				
LLD 15	2,500	5,000	15,000	30,000	45,000
LLD 17	2,100	4,200	12,600	25,200	37,800
LLD 25	1,500	3,000	9,000	18,000	27,000

Film	Length (feet)				
LLD 60	8,202	16,404	49,213	98,425	147,638
LLD 70	6,890	13,780	41,339	82,677	124,016
LLD 100	4,921	9,843	29,528	59,055	88,583

Outside Diameter	1/2x	1x	3x	6x	9x
For 3in / 77mm core	9.5" (in) 242mm	13" (in) 331mm	-	-	-
For 6in / 153mm core	-	-	22.7" (in) 577mm	31.3" (in) 797mm	38.0" (in) 968mm

All rolls are wound to length. Actual OD may vary with thickness and winding density variations.

### Film Storage and Handling

The films should be placed in the processing area 24 hours prior to processing, to acclimatise. The films are largely unaffected by climatic conditions but should not be stored at temperatures above 104°F (40°C). Under suitable storage conditions, the film can be stored for a period of 6 months without any risk of deterioration.

### Food Contact

RayoWrap™ LLD is FDA approved for food contact. Please contact Technical Services for other Food Contact statements.

### Health & Safety Guidelines

MSDS sheets, as well as other product safety documents, are available for our films upon request.

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RayoWrap™ LLD – 2 of 2 – 1019

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