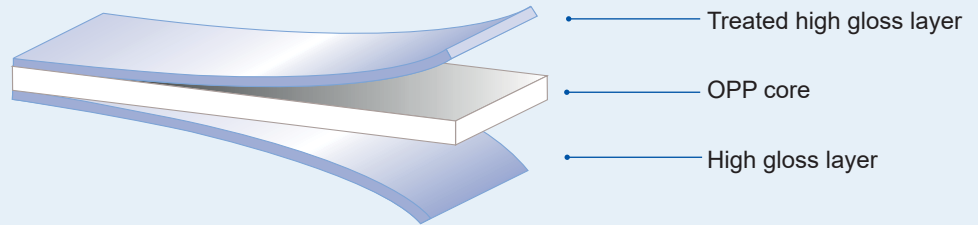


RayoWrap™ LTD

Technical Data Sheet

LTD - Transparent, high gloss, coextruded OPP film

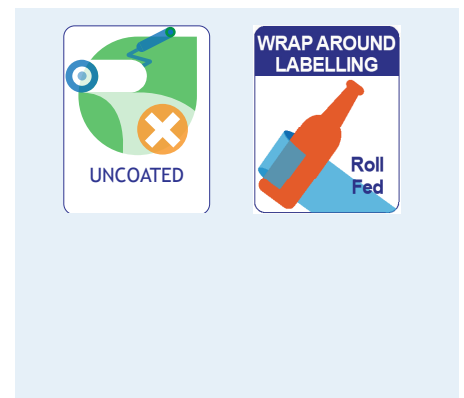


Features

- “No label look”
- Excellent ink and hot melt adhesion
- Very good web flatness
- Good clarity and gloss
- Excellent bond strength for lamination
- Consistent COF and anti-static properties

Application

- Monoweb or laminated roll-fed wrap-around labels



Technical Properties (Typical Values)

Property	Test Method	Test Conditions	Units	LTD							
				15	17	20	25	30	35	40	50
Thickness			micron	15	17.5	20	25	30	35	40	49
			gauge	60	70	80	100	120	140	160	195
Yield			in ² /lb	51,600	44,200	38,700	31,000	25,800	22,100	19,300	15,900
			m ² /kg	73.3	62.8	54.9	44.0	36.6	31.4	27.5	22.7
Basis Weight			g/m ²	13.7	15.9	18.2	22.8	27.3	31.9	36.4	44.1
			lbs/ream	8.4	9.8	11.2	14	16.8	19.6	22.4	27.1
COF				0.30	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Gloss		[20%]		100	90	90	80	80	80	80	80
Haze			%	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Surface tension		Back Print	mN/m (dyne)	36-39	36-39	36-39	36-39	36-39	36-39	36-39	36-39
Tensile strength			% MD	18.85	18.85	18.85	20.31	20.31	20.31	20.31	20.31
			TD	39.16	43.51	43.51	42.06	42.06	42.06	42.06	42.06
Elongation			% MD	180	180	180	200	200	200	200	200
			TD	60	60	60	60	60	60	60	60

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.
 This document is not a product specification and does not guarantee any specific product attributes. Any existing commercial rights or patents must be observed.
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RayoWrap™ LTD

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
Refer to roll tag for specific treatment on roll	Excellent web flatness permits higher speed printing
Lamination	Run appropriate trials prior to production
Usually laminated to Innovia's transparent, metallized or opaque films	Consult your ink supplier
Film is suitable for solvent-based or solvent-less laminations	

Conversion Note -

Generally PVB or NC-based inks with adequate adhesion promoter are suitable for printing on this film. Drying temperatures should not exceed a web temperature of 170°F (76°C). Where static electricity may be generated, use of static eliminators and maintaining a relative humidity >50% is recommended.

Nominal Reel Diameters

Film	Length (metres)				Length (feet)			
	5,000	15,000	30,000	45,000	16,404	49,213	98,425	147,638
LTD 15(60)	5,000	15,000	30,000	45,000	16,404	49,213	98,425	147,638
LTD 17(70)	4,300	12,900	25,800	38,700	14,108	42,323	84,646	126,969
LTD 20(80)	3,750	11,250	22,500	33,750	12,303	36,909	73,819	110,728
LTD 25(100)	3,000	9,000	18,000	27,000	9,843	29,258	59,055	88,583
LTD 30(120)	2,500	7,500	15,000	22,500	8,202	24,606	49,213	73,879
LTD 35(140)	2,200	6,600	13,200	19,800	7,218	21,654	43,307	64,961
LTD 40(160)	1,875	5,625	11,250	16,875	6,152	18,455	36,909	55,364
LTD 50(200)	1,550	4,650	9,300	13,950	5,085	15,256	30,512	45,768

Outside Diameter	1x	3x	6x	9x
For 3in / 77mm core	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™ LTD 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. Food Contact - Rayoface™ LTD is FDA approved for food contact. Please contact Technical Services for FDA Food Contact statements.

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