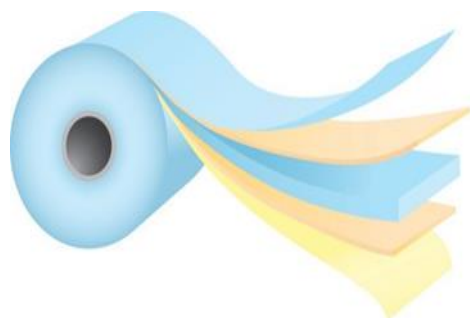


# Non-Heat Sealable Clear BOPP Film

# OPLAR NCL (A02) Converting Grade



CORONA TREATED SKIN  
MODIFIED INTERMEDIATE LAYER  
OPP CORE LAYER  
MODIFIED INTERMEDIATE LAYER  
UNTREATED SKIN

## Product Features

- High surface gloss
- Good optical properties
- Good mechanical properties
- Good surface treatment retention

OPLAR-NCL A02 grade is Non-Heat Sealable Clear BOPP Film for use in printing and lamination applications. The corona treated side is specifically designed for excellent adhesion of inks and lamination adhesives.

## Typical Applications

- Printing and lamination
- Cold seal application

Properties		Unit	Test Method	15	18	20	25	30	35
Nominal Thickness		Micron	Internal	15	18	20	25	30	35
Grammage		g/m <sup>2</sup>	ASTM D 1505	13.7	16.4	18.2	22.8	27.3	31.9
Yield		m <sup>2</sup> /kg	Internal	73.3	61.1	54.9	44.0	36.6	31.4
Density		g/cc	Internal	0.91					
<b>SURFACE PROPERTIES</b>									
Treatment Level	TI/TO	dyne/cm	ASTM D 2578	38	38	38	38	38	38
Haze		%	ASTM D 1003	1.7	1.7	1.8	2	2.5	2.5
Gloss		^45°	ASTM D 2457	90	90	90	90	90	90
Coefficient of Friction	UT/UT	Kinetic	ASTM D 1894	0.4	0.4	0.4	0.4	0.4	0.4
<b>MECHANICAL PROPERTIES</b>									
Tensile Strength	MD	kg/cm <sup>2</sup>	ASTM D 882	1300	1300	1300	1300	1300	1300
	TD			2500	2500	2500	2500	2500	2500
Tensile Elongation	MD	%	ASTM D 882	150	150	150	150	150	150
	TD			50	50	50	50	50	50
Elastic Modulus	MD	kg/cm <sup>2</sup>	ASTM D 882	18000	18000	18000	18000	18000	18000
	TD			28000	28000	28000	28000	28000	28000
<b>THERMAL PROPERTIES</b>									
Shrinkage	MD	%	Internal	4	4	4	4	4	4
	TD			2	2	2	2	2	2
<b>BARRIER PROPERTIES</b>									
WVTR		g/m <sup>2</sup> /day	ASTM F 1249	9.5	8.5	7.5	7	6.5	6
OTR		cc/m <sup>2</sup> /day	ASTM D 3985	2700	2500	2400	2300	2000	1750

MD: Machine Direction, TD: Transverse Direction, TI: Treated Inside, TO: Treated Outside, UT: Untreated

**Disclaimer:** The information provided above is based on SRF FLEXIPAK conclusive tests, which are indicative only and provided as guidelines. Customers are solely responsible for the end use in all respects. Customers should verify the suitability of the film for its end use. SRF FLEXIPAK gives no warranty or accepts liability for any loss and fitness of the product for any specific purpose. SRF FLEXIPAK reserves the right to change the technical data sheet at any time for enhancing the quality of the product without prior information.

**Storage Conditions** between 22-30°C & RH 40-60% is recommended in order to minimize the deterioration of the film properties in general. It is advisable to turn out the inventory on FIFO basis. The film should be conditioned in the operating environment for at least 24 hours before processing.

## SRF Limited, Packaging Films Business

Corporate: Block-C, Sector-45, Gurgaon-122003, Haryana, India

Tel: (+91-124) 435 4400, Fax: (+91-124) 435 4500, pfbfilms@srf.com, [www.srf.com](http://www.srf.com)

SRF Flexipak (South Africa) (Pty) Ltd. 5 Eddie Hagan Drive, Cato Ridge, KwaZulu - Natal, South Africa

