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**TPPPL - WHS - PL**

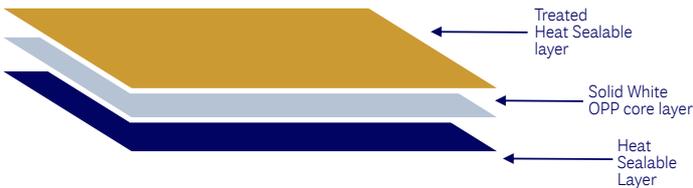
# **DATA SHEET**

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# WHS - PL



## Typical Applications (can be used as single web or laminate structure)

In lamination lap sealable  
 Box and general overwrap  
 Confectionery( Chocolate, Gum, Sugar, Chips, Snacks, Pasta)  
 Bakery (Biscuits, Cookies, Crackers)  
 Frozen and Fresh foods  
 Health and Beauty care  
 Household and Detergents.

## Product Description

TPPPL - WHS - PL is co-extruded, white opaque modified higher density both side heat sealable, corona treated. This opaque and stiff film is ideal for use on HFFS & VFFS machines. It has good whiteness and opacity for various food packaging applications.

## Key Features

- Out-standing opacity & whiteness
- Good seal strength
- Good dimensional stability
- Good stiffness & flex resistance
- Brilliant white appearance
- Good moisture & light barrier
- Excellent surface treatment retention

## TECHNICAL SPECIFICATION

Properties	Unit	Method	Typical Values (WHS-PL)						
<b>Physical Properties</b>									
Nominal Thickness	μ	TPPPL	15	18	20	25	30	35	40
Grammage	gm/m <sup>2</sup>	TPPPL	14.4	17.3	19.2	24.0	28.8	33.6	38.4
Density	Gm/cc	TPPPL	0.95						
Yield	m <sup>2</sup> /kg	TPPPL	69.4	57.8	52.1	41.7	34.7	29.8	26.0
<b>Optical Properties</b>									
Opacity(Max)	%	DIN	60	62	65	70	72	75	80
Gloss @ 45° (Min) Matt	-	ASTM D 2457	45						
<b>Surface Properties</b>									
Wetting Tension (Min)	Dyne/cm	ASTM D 2578	38						
Dynamic Coefficient of Friction (NT/NT)	-	ASTM D 1894	0.40						
<b>Mechanical Properties</b>									
Tensile Strength (at Break) (Min)	N/mm <sup>2</sup>	ASTM D 882 MD TD	130 260						
Elongation (at Break) (Max)	%	ASTM D 882 MD TD	165 50						
Elastic Modulus (Min)	N/mm <sup>2</sup>	ASTM D 882 MD TD	1600 2700						
<b>Thermal Properties</b>									
Shrinkage@120°C 5 Minutes air (Max)	%	TPPPL MD TD	4.0 2.0						
Heat Seal Range	°C	TPPPL NT/NT	105-140						
Seal strength @130°C 1 hr, 0.5 sec	N/inch	TPPPL NT/NT	4.0	6.0			7.5		
<b>Barrier Properties</b>									
WVTR @ 38°C, 90% RH	Gm/m <sup>2</sup> /24h	ASTM F 1249	8.0	7.8	7.5	7.2	7.0	6.8	6.0

MD- Machine Direction, TD- Transverse Direction, NT- Non-Treated, RH- Relative Humidity, TPPPL- Tempo Paper Pulp & Packaging Ltd.

# WHS-PL

## Corona Treatment Indication

TPPPL – WHS-PL can be supplied either with treatment on the inside surface (TI) Outside surface (TO). This must be agreed with our sales representative before processing the order.

## Roll Size Availability

Film Type	Standard Length (m)	2 x Std. Length	4 x Std. Length	6 x Std. Length	8 x Std. Length
WHS-PL 15	4250	8500	17000	25500	34000
WHS-PL 18	3550	7100	14200	21300	28400
WHS-PL 20	3200	6400	12800	19200	25600
WHS-PL 25	2550	5100	10200	15300	20400
WHS-PL 30	2100	4200	8400	12600	16800
WHS-PL 35	1800	3600	7200	10800	14400
WHS-PL 40	1600	3200	6400	9600	12800

## Corresponding Roll's Outer Diameter

Core ID 76 mm	305 mm	419 mm	588 mm	716 mm	825 mm
Core ID 152 mm	337 mm	444 mm	605 mm	730 mm	838 mm

\*For availability of roll sizes (multiples of standard length) please refer to the Sales Representative

## Legal Statement

Contact your Tempo Customer Service Representative /Sales Representative for potential food contact application compliance (e.g. FDA, NAFDAC) & MSDS. This product is not intended for use in medical applications and should not be used in any such applications. The figures and data provided in this datasheet are consistent with the current state of our knowledge and are intended to provide general information about our products and their applications. They do not constitute a guarantee of any specific product attributes or the suitability of products for specific applications.

### For technical enquiries, please contact:

Sandeep Kumar, Q.A. Manager

sandeep.kumar@tempong.com

07045745029

**Factory & Sales Office:**  
**Tempo Paper Pulp & Packaging Ltd.**  
Klm5, Idiroko Road, Behind General Hospital  
Ota, Ogun State, Nigeria.  
info@tempong.com