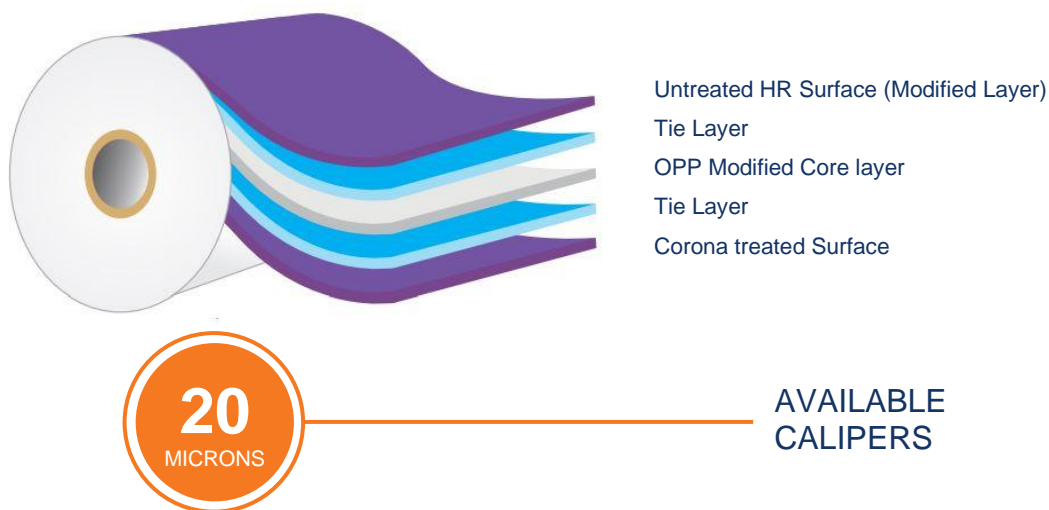


PROVISIONAL

## TS20TIFHRR

TRANSPARENT HIGH HEAT RESISTANCE ONE SIDE CORONA TREATED  
BOPP BASE SUBSTRATE FOR COATING / VACUUM METALLISATION  
PROCESS



### DESCRIPTION

TS20TIFHRR is a Transparent Co-extruded BOPP film with ultra-high heat resistant characteristics & outstanding dimensional stability. It is one side corona treated & other side modified high heat resistance surface. Its untreated surface is modified which can endure heat and shrinking during pack sealing; its core layer is also modified for better rigidity compared to conventional plain BOPP Films. Film is specifically designed to use as base substrate to develop/produce Retortable UHB BOPP film through SIOX/ALOX.

### PRODUCT FEATURES

- Outstanding dimensional stability / shrinkage
- Endurance to heat and shrinking during sealing
- Good Stiffness and Mechanical Properties
- Easy jaw release
- Good Optics
- Good Printability & suitable for lamination with other substances

### APPLICATIONS

Film is suitable as base substrate for coating & Special Vacuum metallization Process e.g.

- SIOX/ALOX

### NOMENCLATURE

TS20TIFHRR... Wetting tension Surface Inside, Untreated Heat resistance Surface Outside  
TS20TOFHRR...Wetting tension Surface Outside, Untreated Heat resistance Surface Inside

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	PROPERTIES	POSITION	TS20TIFHRR	UNITS	TEST METHOD
GENERAL	Nominal Thickness	-	20	μ	Internal Method
	Density	-	0.91	g/cc	Internal Method
	GSM	-	18.20	g/m <sup>2</sup>	Internal Method
	Yield	-	54.9	m <sup>2</sup> /kg	Internal Method
OPTICAL	Haze	-	3.5	%	ASTM D 1003
	Gloss	-	95	GU	ASTM D 2457
SURFACE	Dynamic COF	Utr/Utr	0.25	-	Internal Method
		Utr/Metal	0.20	-	Internal Method
	Wetting Tension	-	38*	dynes/cm	ASTM D 2578
MECHANICAL	Tensile Strength (at break)	-MD	1300	kg/cm <sup>2</sup>	ASTM D 882
		-TD	2700		
	Elongation (at break)	-MD	160	%	ASTM D 882
		-TD	60		
THERMAL	Elastic Modulus	-MD	20000	kg/cm <sup>2</sup>	ASTM D 882
		-TD	40000		
	Linear Shrinkage	-	2	%	ASTM D 1204 (120°C, 5min)
		-	1		
	Heat Seal Range	-	NA	°C	Internal Method
	Heat Seal Strength	-	NA	g/25mm	Internal Method (130°C/1sec/30psi)

\* 38 dyne/cm guaranteed for 6 months from the invoice date in controlled ambient condition as mentioned in storage guidelines

The figures and above properties refer to typical values which are indicative only. Customers should verify the suitability of the film for its specific end use. Therefore this document will not represent a product specification.

GUIDELINES FOR STORAGE

Temperature should preferably be less than 30°C & humidity 55±5% in storage areas and material should be consumed within three months of receipt. OPP films should be allowed to reach operating room temperature 24 hours before use

FOOD CONTACT

OPP films complies with the requirements of FDA, EC & REACH regulations. Specific documentation is available on request.

SAFETY

Compliance with industrial health and safety standards. OPP films do not present any significant danger to health and safety in the workplace, provided they are used for the intended purpose in accordance with conventional practices and that health & safety regulations are observed. Relevant guidelines can be found in our MSDS (available upon request).

CAUTIONS

- Film characteristics are maintained for six months from the date of invoicing