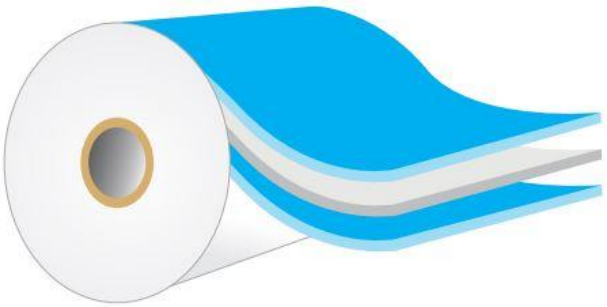
TECHNICAL DATA SHEET

TOPPAN

TSTIHS1

BOPP FILMS

TRANSPARENT HEAT SEALABLE CORONA TREATED ONE SIDE STABLE SLIP GRADE FOR CONVERSION



Corona Treated Heat Seal Surface
OPP Core
Untreated High Slip Heat Seal Surface

20, 25 30 MICRONS

AVAILABLE CALIPERS

DESCRIPTION

TS20TIHS1 is transparent co-extruded low COF **BOPP** film. It is one side corona treated & both side heat sealable. Untreated heat-seal surface is specially designed to give low stable COF, good seal strength and sealing range which gives robust performance on all types of HFFS & VFFS machines.

PRODUCT FEATURES

- Exceptional slip properties
- Stable co-efficient of friction
- Excellent Hot slip
- Total forgiving on HFFS & VFFS machines
- Good printability and suitable for lamination with other substrates
- Good Optical properties
- Good Stiffness & Mechanical properties

APPLICATIONS

Can be used as a single web or in laminate structures.

- Confectionery (chocolate/gum/sugar)
- Bakery (biscuits/cookie/crackers)
- Chips/snacks/pasta
- Health and beauty care
- Frozen Food
- Household & Detergents

NOMENCLATURE

TSTIHS1 – Corona treated surface is Inside & Untreated Heat seal surface is Outside
TSTOHS1 – Corona treated surface is Outside & Untreated Heat seal surface is Inside

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	PROPERTIES	POSITION	TS20TIHS1	TS25TIHS1	TS30TIHS1	UNITS	TEST METHOD
GENERAL	Nominal Thickness	-	20	25	30	µ	Internal Method
	Density	-	0.91	0.91	0.91	g/cc	Internal Method
	GSM	-	18.2	22.8	27.3	g/m^2	Internal Method
	Yield	-	54.9	43.9	36.6	m^2/kg	Internal Method
OPTICAL	Haze	-	2.5	2.5	3.0	%	ASTM D 1003
	Gloss	-		90		GU	ASTM D 2457
SURFACE	Wetting Tension	-		40		dy/cm	ASTM D 2578
	COF (Maximum)	Film/Film		0.30		-	ASTM D 1894
		Film/Metal		0.28		-	ASTM D 1894
MECHANICAL	Tensile Strength (at break)	-MD		1300		kg/cm^2	ASTM D 882
		-TD		2700			
	Elongation (at break)	-MD		180		%	ASTM D 882
		-TD		60			
	Elastic Modulus	-MD		18000		kg/cm^2	ASTM D 882
		-TD		32000			
THERMAL	Linear Shrinkage (max)	-MD		5		%	Internal Method
		-TD		3			
	Heat Seal Range	-		105-145		°C	Internal Method
	Heat Seal Strength	-	350	400	450	g/25mm	Internal Method
BARRIER	WVTR (38°C, 90% rh)	-		7.5		g/m^2/day	ASTM F 1249

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.

* 38 dyne/cm guaranteed for 4 months from the invoice date in controlled ambient condition as per below storage guidelines.

GUIDELINES FOR STORAGE

Temperature should preferably be less than 30°C & humidity 55±5% in storage areas and material should be consumed with three months of receipt. OPP films should be allowed to reach operating room temperature 24 hours before use. Film characteristics are maintained for six months from the date of manufacturing.

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 except for wetting tension
- Coated reels must not be stacked.