

## PROVISIONAL

## TDU

## BOPP FILMS

TRANSPARENT ULTRA LOW HEAT SEAL TEMPERATURE HIGH HOT-TACK HIGH SEAL STRENGTH CORONA TREATED ONE SIDE FOR HIGH SPEED PACKAGING APPLICATIONS



## DESCRIPTION

TDU is transparent co-extruded **BOPP** film, one side ultra low seal initiation temperature (SIT~70°C). Especially designed for high speed packaging where its wide seal operating window can be used on high speed machines.

## PRODUCT FEATURES

- Wide sealing range with ultra low seal initiation temperature (SIT ~ 70°C)
- Excellent sealing properties in term of strength, hot-tack and integrity
- Remarkable performance on HFFS & VFFS machines
- Excellent seal integrity in presence of contaminants and humidity
- Good optical properties
- Good COF & antistatic properties
- Non toxic
- Lap sealable with other co-ex BOPP.

## APPLICATIONS

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

- Confectionery (chocolate/gum/sugar)
- Soap Wrapper
- Bakery (biscuits/cookie/crackers)
- Frozen food
- Health and beauty care
- Household and detergents

## TOPPAN SPECIALITY FILMS

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	PROPERTIES	POSITION	TDU35TI	UNIT	METHOD
GENERAL	Nominal Thickness	-	35	μ	Internal Method
	Density	-	0.91	g/cc	Internal Method
	Grammage	-	31.85	g/m <sup>2</sup>	Internal Method
	Yield	-	31.4	m <sup>2</sup> /kg	Internal Method
OPTICAL	Haze	-	< 3.0	%	ASTM D 1003
	Gloss	-	90	GU	ASTM D 2457
SURFACE	Dynamic COF	Film/Film	0.25	-	ASTM D 1894
	Wetting Tension	-	40*	dyne/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	190	%	ASTM D 882
		- TD	60		
THERMAL	Elastic Modulus	- MD	18000	kg/cm <sup>2</sup>	ASTM D 882
		- TD	32000		
	Linear Shrinkage (max)	- MD	4	%	ASTM D 1204
		- TD	2		
	Heat Seal Range	-	70-140	°C	Internal Method
	Seal Strength	-	550	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 manufacturing
- Please make sure printing surface is well dried before lamination