



Product Data Sheet **TPU 2003**

Erez Thermoplastic Products | Kibbutz Erez M.P Ashkelon Coast 7915000 Israel Tel: +972 8 6801200 / 201 | sales_etp@erez-therm.com www.erez-therm.com

Product Name: TPU 2003

TPU both sides coated membrane, Nylon fabric.

Certified in accord to: LSA Code, Regulations I/1.2 and IV/4.2. IMO Resolution **MSC. 81 (70)** Part 1. **Compliance with:** Inflatable boats **ISO 6185**

Spec. Para.	Properties	Requirements	Results
7.	Base Fabric, Type	-	Nylon
7.1	Base Fabric, dtex	-	950 dtx
-	Total Weight	-	680 gr/m²
-	Width[s]****	-	150, 205 [cm]
21.1 (I)	Tensile Strength - Kgf / 50 mm width- Warp	230 min	275
	Tensile Strength - Kgf / 50 mm width- Weft	225 min	250
	Elongation at 225 - Kgf / 50 mm - % Warp	30 max	20
	Elongation at 225 - Kgf / 50 mm - % Weft	30 max	25
21.1 (II)	Tear Strength - Kgf - warp	105	120
	Tear Strength – Kgf - weft	105	110
21.1 (III)	Surface Receptiveness - Kgf / 50 mm	7.5 min.	20 / 20
	Coating Adhesion- Dry - 7.5 Kgf/50 mm- 5 min.	Max. 5 mm separation	Pass
	Wet - 5.0 Kgf/50 mm - 5 minutes		Pass
	(Wet- 24 hours in 3% Aqueous Sodium Chloride)	Max. 5 mm separation	
21.1 (IV)	 Effects of Ageing (i) in air at 70°C ± 2°C for 7 days (ii) suspended over water for 7 days at 70°C ± 2°C Folding test, after (i) & (ii) Tensile Str % of original, after (i) & (ii) 	No Cracks, separation 90 min	Complies Pass
21.1 (V)	Dimensional stability - %, after (i) & (ii)	2 max. 0.7 / 1.2	
21.1 (VI)	Low Temperature - 50°C	No Cracks Pass	
21.1 (VII)	Flex Cracking – 200,000 cycles*	No Cracks or	David
	(After soaking for 7 days in 2% solution of brine)	Delamination Pass	



We believe this information is the best currently available. This product data sheet is subject to revisions once additional know-how is gained. We make no guarantee of results and assume no obligation liability whatsoever in connection with this information.



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Spec Para	Properties	Requirements	Results	
21.1 (VIII)	Porosity at 4 psi	No leakage at 5 minutes	Pass	
21.1 (IX)	Oil resistance- ASTM No. 1 (2 hours) ** 20 °C	No Smear, Separation, Tackiness	Pass	
21.1 (X)	Weight variation - % of spec.	± 10 max.	± 8	
21.1 (XI)	Weft Distortion - mm	100 max.	50	
21.1 (XII)	Blocking - Lifting force - gmf	100 max.	Pass	
21.1 (XIII)	Weld Strength - Kg per 25 mm width	18 min.	27	
21.1 (XIV)	Hydrolysis Resist Coating Adhesion - Kg/50 mm	5.0 min.	16	
	- Blocking - gmf	100 max.	Pass	
	- Weld Strength - Kg / 25 mm	12.5 min	18	
	- Folding Test	No Cracking,	Dace	
	(12 weeks over water in closed container at 93°C)	delamination	Pass	
21.1 (XV)	Ozone Resistance**	No Cracks	Pass	
	Abrasion Resistance (Taber H-22 Wheel 1 Kg load) ASTM D 3389	>10,000 cycles to expose	>10,000 cycles to expose the fabric	

PROP 65: The product does not require warning label in accord to proposition 65:2018, as the product does not contain a listed substance or/and is under the NSRL "Safe Harbor" levels.

- **Remarks:** * Flex resistance preformed similar to DeMattia type of machine (200 Cycles per minutes).
 - ** Oil & Ozone resistance not relevant, but performed in 3rd party Laboratory.
 - *** Max. Service temperature (+70°C) in short cycles. Not more than 1hr cycles.
 - **** For special/additional widths, please contact EREZ's representative.



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Properties	Typical Cha	Typical Characteristics		
Test & Method	English	Metric		
Base Fabric	Nylon 855 Den 7 [Oz/yd²]	Nylon 950 Dtx 240 [gr/m²]		
Weave density Fed. Std 191A:5050	30.5 / 30.5 [yarn/inch]	12 / 12 [yarn/cm]		
Total Weight ASTM D 751	20 [Oz/yd²]	680 [gr/m²]		
Width[s]**	59, 81 [inch]	150, 205 [cm]		
Breaking Strength - Strip ISO 1421	280 / 280 [lbs/inch]	2500 / 2500 [N/5 cm]		
Elongation ISO 1421	25 / 30 [%]			
Tear Strength - Grab ASTM D 751 method A	270 / 270 [lbs/inch]	2400 / 2400 [N/5 cm]		
Tear Strength - Single Rip / Tongue ASTM D 751 method B, DIN 53356	13 / 15 [lbs]	60 / 70 [N]		
Tear Strength - Trapezoid ISO 1421 [MSC.81 (70)]	264 / 220 [lbs]	1200 / 1000 [N]		
Coating Adhesion ISO 2411	28 / 28 [lbs/inch]	250 / 250 [N/5 cm]		
Flame Resistance ISO 3795, FMVSS 302	≤ 3.15 [inch/min]	≤ 80 [mm/min]		
Air Porosity B.S. 6F 100 Clause 3.17	Pass (10 min at 7 psi)			

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