

Product Name: TPU 1001 S

Polyurethane Coated membrane, Nylon fabric.

End Use: Inflatable life jacket bladders

Complies with: UL 1191 File No: MQ1807 Codes: 1F, 2F, 3F, 5H and ISO 12402-7

Property	Test Method	Exposure & Method	UL 1191 Requirements	
			English	Metric
Fabric Type	-	-	Nylon	Nylon
Fabric Count	ASTM D3775	-	66/56 per inch	26/22 per cm
Fabric Weight	ASTM D3776	-	3.2 Oz/ yd ²	109 gr/m ²
Total Weight	ASTM D3776	-	8 Oz/ yd ²	273 gr/m ²
Breaking Strength (Grab)	ASTM D5034 Method G-E	1. Standard Condition	246 / 209 lbs	1094 / 930 N
		2. After accelerated aging 168 hours 158°F (70°C) FTMS 191A Method 5850	≥90%	≥90%
		3. After soil burial and fungus Resistance 12 weeks. FTMS 191A Method 5762	≥90%	≥90%
		4. After 100 hours Accelerated weathering. Carbon Arc Weatherometer	≥60%	≥60%
		5. After 300 hours Accelerated weathering. Carbon Arc Weatherometer	≥40%	≥40%
Breaking Strength (Strip)	ASTM D5035	1. Standard Condition	194 / 167 lbs	863 / 743 N
		2. After abrasion resistance. FTMS 191A Method 5304	≥75%	≥75%
Trapezoid Tear Strength	FTMS 191A Method 5136	1. Standard Condition	9.8/8.1 lbs	44 / 36 N
		2. After accelerated aging 168 hours 158°F (70°C) FTMS 191A Method 5850	≥90%	≥90%

Property	Test Method	Exposure & Method	UL 1191 Requirements	
			English	Metric
Seal Seam Strength	ASTM F88& ASTM D5035 Method 2C-E	1. Standard Condition	71/65 lbs/inch	63/58 kgf/5 cm
		2. At 149°F (65°C) @ 95% RHT for 360 hr.	≥75%	≥75%
Permeability of CO ₂	ASTM D1434	1. Standard Condition	1.25x10 ⁻¹³ mol /m ² .s.Pa	1.25x10 ⁻¹³ mol /m ² .s.Pa
		2. After accelerated aging 168 hours 158°F (70°C) FTMS 191A Method 5850	≤ 110%	≤ 110%
		3. After soil burial and fungus Resistance 12 Weeks. FTMS 191A Method 5762	≤ 110%	≤ 110%
		4. 149°F (65°C) at 95% Relative humidity for 360 hr. ASTM D3690	≤ 110%	≤ 110%