

Laboratory Global Engineering Center-Test Laboratory, Goodrich Aerospace Services Pvt. Ltd., 14/1 & 15/1, Maruthi Industrial Estate, Phase 2, Hoody Village, K.R. Puram Hobli, Whitefield Road, Bangalore, Karnataka

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6844 (in lieu of T-2618)

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Validity 03.12.2017 to 02.12.2019

Last Amended on 30.01.2018

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
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MECHANICAL TESTING

I.	TEXTILE MATERIALS			
1.	Coated Fabrics (Polyurethane, Neoprene) used in manufacturing of aircraft emergency evacuation slides/life rafts (Airborne equipment)	Seam Peel Strength	SP-717 Rev4-2005 (FTMS 191A 1978 Method 5960, 5100 And TSO-C69c-1999)	14 N to 178 N (10 to 40 lbf)
		Grab Tensile Strength	SP-752 Rev.A-2014 (FTMS 191A 1978 Method 5100 and TSO-C69c-1999)	444N to 2.669 kN (100 to 600 lbf)
		Trapezoidal Tear Strength	SP-753 Rev B-2003 (FTMS 191A 1978 Method 5970) ASTM D5587 2015)	44 N to 178 N (10 to 40 lbf)
		Puncture Resistance	SP-748 Rev1-1999 (TSO-C69c-1999)	267N to 890N (60 lbf to 200lbf)
		Flammability-Horizontal	SP-731 Rev4-2002 (Horizontal) Federal Aviation Regulation, Part 25, Airworthiness Standards: Transport Category Airplanes: Para 25.853(a), Amendment 25-83 Eff. 3/6/95	Char Length Upto 35.56 cm (14") Qualitative (< 8" for pass)
		Flammability-Vertical	SP-721 Rev9 -2003 (Vertical) and ASTM D6413M-15 (Vertical Test) DOT/FAA/AR-00/12, "Aircraft Materials Fire Test	Char Length Upto 35.56 cm (14") Qualitative (< 8" for pass)

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			Handbook"; FAR, Part 25, para 25.853(a) and TSO-C69c-1999	
		Coating Adhesion	SP-733 Rev 6-2005 (FTMS 191A 1978 Method 5970)	44N to 178N (10 to 40lbf)
		Seam Shear	SP-717 Rev.4-2005 (FTMS 191A 1978 Method 5100 and TSO-C69c-1999)	262.7N/cm to 1576 N/cm (150 to 900 lbf/inch)
		Radiant Heat Resistance	SP-732 Rev 3-2003 ASTM F 828-1983 and TSO-C69c-1999)	Heat Flux: Upto 2.27w/cm ² (Upto 2 BTU/ft ² -sec) Pressure: ≤ 34.47 kPa (≤ 5 psi)
		Air Retention	PS-43 Rev C-2006 (MIL-C-91002D & ASTM D5193/D5193M-93)(2012)	Qualitative
		Weight of Fabric	SP-754 Rev A-2003, FTMS 191A 1978, Method 5041-2000	17gsm to 800gsm (0.5 to 23 oz/yd ²)
2.	Coated Fabrics used in manufacturing of aircraft emergency evacuation slides/life rafts. (Polyurethane, Neoprene, Airborne equipment)	High Temperature	RTCA-DO 160G-2014 Section 4 TSO-C69c-1999	Qualitative (Ambient to 180°C)
		Low Temperature	RTCA-DO 160G-2014 Section 4 TSO-C69c-1999	Qualitative (Ambient to (-)70°C)

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II.	PERFORMANCE TEST			
1.	Airborne Equipment- Insulating resistor, LED Lights	Humidity	RTCA-DO 160G-2014, Section 6, Category A,B and C.	Qualitative (15 % RH to 90 % RH 38°C to 65°C)
2.	Airborne Equipment- Aluminum panels and fill cap adaptor LED lights	Salt Fog	RTCA-DO160G-2014, Section 14,ASTM B117-16	Qualitative
3.	Airborne Equipment	Vibration	RTCA-DO 160G-2014 Section 8 MIL STD 810G	Qualitative (Frequency: 5 to 3000 Hz (on Armature) 5 to 2000 Hz (on Slip table) Acceleration Level: 0.1 g to 45 g for weight up to 10 kg (on slip table) 0.1 g to 100 g for weight up to 10 kg (on Armature) 0.1 g to 25 g for weight up to 100 kg (on slip table) 0.1 g to 55 g for weight up to 100 kg (on Armature) Displacement: 2.0 in (50.8 mm) pk-pk

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		Operation Shock and Crash Safety	RTCA-DO 160G-2014 Section 7	Qualitative (Acceleration Level: 50 g for weight up to 100 kg (on slip table) - 4 ms 100 g for weight up to 100 kg (on Armature) - 4 ms 50 g for weight up to 100 kg (on slip table) -11 ms 100 g for weight up to 25kg (on Armature) - 11 ms Displacement: 2.0 in (50.8 mm) pk-pk

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