

Appendix-A
Requirements of Fabric Nylon 66 Breathable Polyurethane Coated Disruptive Army Camouflage Pattern 180 cms wide.

S. No.	Description	Required Value	Test Method
1.	Material	Polyamide 66	IS:667
2.	Width (cms)	180 + 2.0 (No minus tolerance)	IS: 7016 (Pt-1)
3.	Mass/m ² (g)	85 ± 5	IS: 7016 (Pt-1)
4.	Weave	Plain	
5.	Nature of coating	Polyurethane	Annexure-I
6.	Ends/dm	460 ± 20	IS: 1963
7.	Picks/dm	330 ± 20	IS: 1963
8.	Mass of deproofed fabric (g/m ²)	65 (+ 10gm, - 5gm)	IS: 7016(Pt-1) & Clause 5.3 of BS: 3424 may be referred for solvents & details for deproofing.
9.	Breaking Strength (kgf) (5 x 20 cm between grip) Warp Weft	80.0 min 64.0 min	IS: 7016 (Pt-2)
10.	(a) Tear Strength (N) (Tongue Method) Through Warp Through Weft (b) Separation of PU film	90.0 min 90.0 min On fraying threads in warp and weft direction up to 5 mm after cutting the fabric from any portion, the acceptance or rejection shall be as per Annexure II	IS: 7016 (Pt-3) Method A-I Annexure-II
11.	Blocking	Separation without damage to surface on lifting of weight piece.	BS:3424-11:1993, ISO 5978:1990
12.	Resistance to accelerated ageing at 70 °C for 168 hours.	No sign of softening/stiffening/tackiness	IS: 7016 (Pt-8)
13.	Resistance to damage by flexing (After 1,00,000 cycles)	Fabric should not develop wrinkle/crack/flaking.	IS: 7016 (Pt-4)

Appendix-A(Contd)Requirements of Fabric Nylon 66 Breathable Polyurethane Coated Disruptive Army Camouflage Pattern 180 cms wide.

14.	Resistance to low temperature (- 30 °C for 6 hours)	Fabric should not show any change in stiffness)	IS: 7016 (Pt-10)
15.	Nature of Dye	Acid/Metal Complex	IS: 4472 (Pt-2)
16.	Colour Fastness to i) Light ii) Washing	Rating V or better Rating IV or better	IS: 2454 or ISO 105-BO2 (Xenon/Carbon Arc source) Test Number C(3) of IS/ISO 105-C10:2006
17.	Water repellency(Uncoated face) Spray Rating	80 min	IS: 390
18.	Water proofness (Coated side) * Note : observation in respect of wetting etc. within 5 mm of inside of the gasket will be ignored.	No percolation of water through the fabric or wetting of the outer surface. *	IS: 7016 (Pt-7) Low Pressure method water pressure 30 cm for 30 minutes.
19.	Moisture Vapour Transmission (Breathability) Option 'B', Temp-23°C, Humidity in cup-100%, Humidity in chamber-50% and Air flow - 2.5 m/sec	2 mg/cm ² /hour (min)	As per ASTM-96-95

ADDITIONAL PROPERTIES

1. Base fabric: Base fabric shall be woven from continuous filament yarns of Polyamide.
2. Coating Material: There shall be continuous solid layer of suitably formulated flexible aqueous base polyurethane breathable resin.
3. The fabric shall be clean, evenly woven in plain weave and free from any weaving defect and stain. The fabric shall be thoroughly desized, scoured and heatset. The coated layer shall have high adhesion to base fabric to with stand specified flexing cycles and shall be free from pinholes.
4. The fabric should be free from any crinkling or rustling sound.
5. The finished fabric shall be sufficiently pliable and free from tackiness and any objectionable odour.

NOTE: - Repeatability & reproducibility of test results must be ensured when tested for correlation testing.