

SPECIFICATION

C-SDOTE NO. 036 ADVI 920 Dt. 23.09.2019

SIS Number: 20190272

Dated : 17/09/2019

Item Code : 2101786815

FABRIC UNIDIRECTIONAL 160 CM WIDTH USED IN SOFT ARMOUR PANEL
(SAP) OF BODY ARMOUR

OCF AVADI SPECIFICATION No.: 1201909/001 (enclard)

~~COMING PLAN: 680 PPS ARMOUR 4154/2859~~ ✓



Nomenclature : Fabric Unidirectional 160 cm width used in Soft Armour Panel (SAP) of Body Armours

Specification:

a) Chemical

- (i) Material: Para Aramid

b) Physical

- (i) Width: 160 \pm 1 cm
(ii) Construction : Unidirectional composite sheets cross plied & orientation
0°/90°/0°/90°
(iii) GSM: 240 \pm 2.5%

c) Mechanical

- (i) Tensile Strength: Minimum 5500N (As per IS 7016 part 2)
(ii) Ball Bursting: Minimum 2400N (As per IS 7016 part 6 method A)

d) Ballistic

- (i) Multiple layers of fabric to a maximum areal density of 3.7 kg/m², when subjected to ballistic testing shall be able to withstand 9mm FMJ RN Bullet (7.4 to 8.2 gms weight and 430 \pm 15 m/s velocity) fired through 9mm Sub Machine Gun (such as Sten Machine, MP-5 Carbine, any other variant) at a distance of 5 meter as per NIJ 0101.06 standard threat level IIIA.

- (ii) Ballistic limit:

The ballistic limit V₅₀ shall not be less than 500 m/s when tested with 9mm FMJ RN Bullet at areal density of 3.7 Kg/ m² as per MIL – 662F standards.

The protection ballistic limit BL(P) shall be the average of 6 fair impact velocities consisting of the three lowest velocity complete penetrations and the three highest partial penetration velocities provided that the spread for the six velocities is not greater than 30 m/s.

In case where the zone of mixed results is greater than 30 m/s (i.e., the highest partial penetration velocity is higher than the lowest complete penetration velocity), the BL(P) shall be the average of 10 fair impact velocities consisting of five lowest complete penetration velocities and the five highest partial penetration velocities provided that the spread for the Ten velocities is not greater than 38 m/s.


- (iii) Firm shall provide Ballistic evaluation report in support of V₅₀ values of each lot.

- (iv) Firm shall provide OEM certificate along with traceability, year of Manufacture (Vintage not before 2019) and Country of Origin Certificate

Note: OCF Avadi reserves the right to perform the ballistic evaluation of item supplied. A sample of multiple layers of 40 X 40 cm with areal density of Maximum 3.7 kg/m² will be tested for threat level IIIA of NIJ 0101.06


Jt.GM/ODC


AWM/ODC


HOS/ODC