

ELEMENT MATERIALS TECHNOLOGY WICHITA

NIJ 0106.01 HELMET:

BALLISTIC PENETRATION TEST

Date Received:January 21, 2025

Via:DHL

Returned Via:DHL

Record No.:SBD25001-4

Test Date:February 3, 2025

Customer:Sestan Busch

Test Conditions

Temperature:21.9 °C

Humidity:42 %

Test Standard:Modified / Abbreviated NIJ Standard 0106.01 for Ballistic Helmets

December 1981

Test Method:IAW Paragraph 5.2 Ballistic Penetration Test

Test Ammunition:IAW NIJ Standard 0108.01, September 1985

Threat Level:IIIA

Conditioning:Ambient

Submersion:No

Range 2

Muzzle to Screen 1:1.52 m

Screen 1 - 2:1.52 m

Screen 2 - Target:1.83 m

Midpoint to Target:2.59 m

Headform Size:7 1/4

Witness Plate:2024-T3 Alum.

Barrel Length:25.4 cm

Sample Tested Description		Test / Ammunition Description					Chronograph		Test Results
Manufacturer:	Sestan Busch	Shot No.	Impact Location	Degree Obliquity	Caliber	Bullet Weight (gr.) / Type	TIME sx-5	VELOCITY m/s	Penetration
Model No.:	BK-ACH	1	Front	0°	9mm	124 / FMJ	361.5	421.6	No Penetration
Size:	L	2	Back	0°			360.7	422.5	No Penetration
Serial No.:	C134103	3	Right	0°			358.5	425.1	No Penetration
Production Date:	01/2025	4	Left	0°			355.9	428.2	No Penetration
Weight (kg.):	1.427								
Protection Level:	NIJ IIIA								

This test report may not be used to claim product certification, approval, or endorsement by NVLAP, NIST, NIJ or any agency of the Federal Government. This report contains data that are not covered by the NVLAP accreditation. This test was performed in accordance with the specification requirements listed in addition to any customer testing modifications or requests. The test results properly reflect the ballistic performance of the listed sample. This test report shall not be reproduced except in full without written approval of Element Materials Technology Wichita. Classification: EAI

Notes:

•Helmet tested as received from customer with retention / suspension system, chinstrap and pads.

Test Ammunition / Velocity Information:

Test Round:Remington (23558), 9mm 124 gr. FMJ RN

Test Velocity:426 +/- 15 m/s (1400 +/- 50 ft/s)

Technician (s): Cisneros / Castillo / Montgomery

Element Materials Technology. • 7447 W. 33rd St. N. Wichita, KS 67205 • U.S.A • Phone 316-832-1600 • www.element.com

ELEMENT MATERIALS TECHNOLOGY WICHITA

NIJ 0106.01 HELMET:

BALLISTIC PENETRATION TEST

Date Received:January 21, 2025

Via:DHL

Returned Via:DHL

Record No.:SBD25001-5

Test Date:February 3, 2025

Customer:Sestan Busch

Test Conditions

Temperature:22.2 °C

Humidity:42 %

Test Standard:Modified / Abbreviated NIJ Standard 0106.01 for Ballistic Helmets

December 1981

Test Method:IAW Paragraph 5.2 Ballistic Penetration Test

Test Ammunition:IAW NIJ Standard 0108.01, September 1985

Threat Level:IIIA

Conditioning:Ambient

Submersion:No

Range 2

Muzzle to Screen 1:1.52 m

Screen 1 - 2:1.52 m

Screen 2 - Target:1.83 m

Midpoint to Target:2.59 m

Headform Size:7 1/4

Witness Plate:2024-T3 Alum.

Barrel Length:25.4 cm

Sample Tested Description		Test / Ammunition Description					Chronograph		Test Results
Manufacturer:	Sestan Busch	Shot	Impact	Degree	Caliber	Bullet	TIME	VELOCITY	Penetration
Model No.:	BK-ACH	No.	Location	Obliquity		Weight (gr.) / Type	sx-5	m/s	No Penetration
Size:	L	1	Front	0°	.44 Mag.	240 / LSWC GC	358.0	425.7	No Penetration
Serial No.:	C134104	2	Back	0°			359.5	423.9	No Penetration
Production Date:	01/2025	3	Right	0°			362.0	421.0	No Penetration
Weight (kg.):	1.454	4	Left	0°			360.2	423.1	No Penetration
Protection Level:	NIJ IIIA								

This test report may not be used to claim product certification, approval, or endorsement by NVLAP, NIST, NIJ or any agency of the Federal Government. This report contains data that are not covered by the NVLAP accreditation. This test was performed in accordance with the specification requirements listed in addition to any customer testing modifications or requests. The test results properly reflect the ballistic performance of the listed sample. This test report shall not be reproduced except in full without written approval of Element Materials Technology Wichita. Classification: EAI

Notes:

•Helmet tested as received from customer with retention / suspension system, chinstrap and pads.

Test Ammunition / Velocity Information:

Test Round:.44 Magnum 240 gr. Lead Semi-Wadcutter Gas Checked (LSWCGC)

Test Velocity:426 +/- 15 m/s (1400 +/- 50 ft/s)

Technician (s): Cisneros / Castillo

Element Materials Technology. • 7447 W. 33rd St. N. Wichita, KS 67205 • U.S.A • Phone 316-832-1600 • www.element.com

Date Received: January 21, 2025
Via: DHL
Returned Via: DHL

Record No.: SBD25001-6
Test Date: February 1, 2025
Customer: Sestan Busch