



EXOSKIN®-S1

LOW-BURDEN,
HIGH PERFORMANCE
CBRN SUIT

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PRODUCT OVERVIEW

Avon Protection's new EXOSKIN-S1 CBRN suit provides improved protection against chemical warfare agents enabling users to operate in a CBRN environment for up to 24 hours.

Leveraging knowledge of soldier system integration, Avon Protection's EXOSKIN-S1 is a low-burden suit that seamlessly integrates with essential CBRN protective equipment including respirators, boots, and gloves.

Made from a low noise emitting outer and an activated carbon inner the EXOSKIN-S1's designed to meet military and first responders requirements.



EXOSKIN-S1 Item	Part Number
Jacket ¼ Zip with Trouser	607734
Jacket Full Zip with Trouser	607735

FEATURES AND BENEFITS



Customizable

- Avon Protection’s EXOSKIN-S1 comes in two variants, a jacket and trouser ensemble.
- Jacket zip available in different configurations and sizes to ensure suitability for all mission types and increased protection factor.
- Closed end ¼ zip or full zip available with hook & loop fastening for improved integration with body armor and added level of security for the user.
- EXOSKIN-S1 offers multiple patterns and color design formulations to help users avoid detection and attack in hostile environments.



Low-Burden

- 30% lighter than conventional CBRN systems (average Large suit <1.8kg or 3.9lbs), reducing physiological burden on the user.
- Integrated hood with cowl front offers unrestricted movement when a respirator is worn, enabling the user to complete their mission effectively and efficiently.



User Focused

- ¼ zip increase comfort when wearing body armor.
- Reinforced elbow and knee pad pockets covering areas of abrasion.
- Trouser braces allow for ease of donning or doffing and adjustment to each individual user’s height. Each leg has a bellowed thigh pocket enabling easy access with hook & loop fastening flaps.
- Roll down hood with hook & loop tab to improve comfort and minimize the risk of snag hazards at reduced MOPP levels.
- Waist and hem adjusters for conformed fit and to adapt fit for multiple size ranges and body shapes.



Improved Protection Factor

- Provides protection against CWAs and tested to protect for a continuous period of up to 24 hours, allowing the user to safely carry on with their mission.
- Integrated hood with double elasticated aperture ensures a protective seal around the respirator, maximizing the protection factor of the suit without restricting movement.
- Features hook and loop adjustable tabs on the lower legs, a thumb loop and inner leg gaiter with stirrup to prevent ingress when worn.
- Seamless integration with Avon Protection’s respirators and the EXOSKIN range of boots and gloves.



Advanced Materials

- Multi-threat protection against vapor, liquid and particulate CWAs allowing the user to operate in different CBRN environments safely.
- Offers 24 hour protection against traditional CWAs, allowing the user longer time on target.
- Made from a lightweight, breathable outer and an activated carbon inner, making the suit feel like second skin for enhanced mobility.
- Flame retardant – Flame Retardancy Index 3 – Standard (BS EN 533:1997).

Shown below are the standard range of patterns and colors available, but customizable suit patterns and colors are also available, subject to licensing and availability.



UK MTP



Black



Tan/Khaki



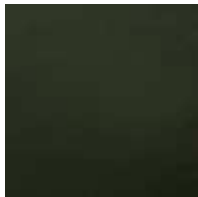
Mono Navy



Dark Olive



Drab Olive



Dark Green

TECHNICAL DATA

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Outer Fabric	
Flame retardancy	Index 3 - Standard (BS EN 533:1997)
Tensile strength	750 N Warp, 360 N Weft - Standard (BS EN ISO 13934-1:1999)
Tear strength	45 N Warp, 45 N Weft - Standard (BS EN ISO 13937-3:2000)
Abrasion resistance	16,000 revs at (9kPa) - Standard (BS EN ISO 12947-2:2016)
Carbon Liner	
Tensile strength	100 N Warp, 120 N Weft - Standard (BS EN ISO 13934-2:2014)
Tear strength	97 N Warp, 38 N Weft - Standard (BS EN ISO 13937-3:2000)
Abrasion resistance	16,000 revs at (9kPa) - Standard (BS EN ISO 12947-2:2016)
Permeation Resistance Swatch Testing	
Laid droplet, diffusive flow GD and HD 10g/m ² (5% RH, 30°C, 24 hours, 1-µl drops)	Penetrated Quantity after 24 hours = GD <0.12 µg/cm ² , HD <0.15 µg/cm ²
Breathability	
Water vapor resistance (Ret)	2.44 m ² Pa/W - Standard (ISO 11092:2014)
Thermal resistance (Rct)	0.007 m ² K/W - Standard (ISO 11092:2014)
Air permeability	34.3mm/sec at 100Pa – Standard (ISO 9237:1995)
MIST test	Passed in accordance with AEP-38 with Avon Protection respirators and EXOSKIN boots and gloves

SIZE GUIDE

Size	Height (cm)	Height (In)	Chest (cm)	Chest (In)	Waist (cm)	Waist (In)	Inside Leg (cm)	Inside Leg (In)
Small/Short	165 - 173	65 - 68	84 - 92	33 - 36	80 - 88	31 - 34	74	29
Medium/Short			92 - 100	36 - 39	88 - 96	34 - 37		
Large/Short			100 - 108	39 - 42	96 - 104	37 - 41		
X-Large/Short			108 - 116	42 - 46	104 - 112	41 - 44		
2XL/Short			116 - 124	46 - 49	112 - 120	44 - 47		
3XL/Short			124 - 132	49 - 52	120 - 128	47 - 50		
Small/Regular	173 - 180	68 - 71	84 - 92	33 - 36	80 - 88	31 - 34	79	31
Medium/Regular			92 - 100	36 - 39	88 - 96	34 - 37		
Large/Regular			100 - 108	39 - 42	96 - 104	37 - 41		
X-Large/Regular			108 - 116	42 - 46	104 - 112	41 - 44		
2XL/Regular			116 - 124	46 - 49	112 - 120	44 - 47		
3XL/Regular			124-132	49 - 52	120 - 128	47 - 50		
Small/Long	180 - 188	71 - 74	84 - 92	33 - 36	80 - 88	31 - 34	84	33
Medium/Long			92 - 100	36 - 39	88 - 96	34 - 37		
Large/Long			100 - 108	39 - 42	96 - 104	37 - 41		
X-Large/Long			108 - 116	42 - 46	104 - 112	41 - 44		
2XL/Long			116 - 124	46 - 49	112 - 120	44 - 47		
3XL/Long			124 - 132	49 - 52	120 - 128	47 - 50		