

Blizzard Protection Systems Limited Unit 2 Coed y Parc Industrial Estate Bethesda, Gwynedd LL57 4YY United Kingdom

Blizzard Protection Systems Limited

Product Specifications, Information and Risk Analysis

Manufacturers Name and Address Blizzard Protection Systems Limited Unit 2 Coed y Parc Industrial Estate Bethesda, Gwynedd, LL57 4YY United Kingdom



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1. Product Title & Numbers

This document includes information regarding the following products:

BPS followed by 2 or 3-digit number (followed by O or G) BPSAR followed by 10, 11 or 12 BSPR followed by 01 or 03

2. Description

The Blizzard Survival Products incorporating Reflexcell[™] material has become the standard wherever thermal performance in a lightweight compact package is essential. Used extensively by the military and emergency services, our products are also ideal for personal survival, outdoor activities and casualty care.

The idea of Reflexcell[™] was conceived 20 years ago when the founder and Managing Director of Blizzard Survival, Derek Ryden, realized that outdoor enthusiasts and professionals needed something more effective than plastic bivvy bags and lighter than conventional sleeping bags.

An engineer by profession, and today still an active mountaineer, Derek invented Reflexcell[™], a super-lightweight material that provides unprecedented thermal performance in the most demanding conditions.

Following exhaustive in-house testing and trials performed by the US Army Institute of Surgical Research, the Blizzard Survival Blanket has been endorsed by the US Army Medical Centre Directorate of Combat and Doctrine Development and is the blanket used to train Army medics in the treatment of hypothermia.

Using a tog rating of 8 Togs and a weight of 330 grams for the Reflexcell[™] bag gives a value of 24 Togs/kg. This is well over twice the value for goose down, which was previously regarded as having the highest possible warmth-to-weight ratio among usable insulating materials. It is worth noting that the warmth-toweight ratio of goose down is drastically reduced by the presence of moisture, whereas that of Reflexcell[™] is hardly affected.



3. Features & Options

In the last 20 years Blizzard Protection Systems engineers along with industry experts, clinicians and customers have developed a wide range of products to suit all applications. We provide products to suit every need from mountain walkers to front line military trauma. Within these ranges we provide options that enable to user to balance size, weight, thermal performance and casualty access depending on the particular requirement of the applications. These options include colour (Green/Orange), packed size, open size, weight, number of openings, position of openings (front, side, front & side), type of opening (hook & loop/double sided tape), and inclusion of active heat elements.

More detailed information on the technology used within blizzard products and the applications of these options can be found on our website <u>https://www.blizzardsurvival.com</u>



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4. Individual Product specifications

Code	& Colour	Description			Closure	Pack Size L x W x H	Open Size L x W x H	Weight	GTIN-13
Green	Orange			Access	Туре				(Product Barcode)
		TRAUMA BLANKETS - 3 Layer - TOG 7 (3/7)							
NSN 6532-01-		Blizzard Trauma Blanket Full length Standard Blanket- The no. 1 choice of US military.	L	Front	Double Sided Tape	23x11x5cm	2.3x2.0m	430g	5060297210006
	BPS-10 NSN 7210-99-958- 4316 Blizzard Trauma Blanket Full length Standard Blanket- The no. 1 choice of US military.		L	Front	Double Sided Tape	23x11x5cm	2.3x2.0m	430g	5060297210013
BPS-33		Blizzard AMB Trauma Blanket Full length Blanket with Side access- Allows access to arms and sides.	L	Side	Hook & Loop	20x25x6cm	2.3x1.0m	53Og	5060297210020
	BPS-34	Blizzard AMB Trauma Blanket Full length Blanket with Side access- Allows access to arms and sides.	L	Side	Hook & Loop	20x25x6cm	2.3x1.0m	53Og	5060297210051
BH-07 NSN 7210-99- 983-2108		Blizzard Casualty Trauma Blanket XL (No Heat pads) Premium XL Full length, Multiple access blanket.	XL	Front & Side	Hook & Loop	30x25x5cm	2.45x2.1m	84Og	5060297210082



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	BH-09	Blizzard Casualty Trauma Blanket XL (No Heat pads) Premium XL Full length, Multiple access blanket.	XL	Front & Side	Hook & Loop	30x25x5cm	2.45x2.1m	84Og	5060297210099
BSPR-01 NSN 7210-99- 153-5295		Blizzard Casualty Trauma Blanket (No heat pads) Premium Large Full length, Multiple access blanket- reduced width.	L	Front & Side	Hook & Loop	23x11x6cm	2.45x1.6m	62Og	5060297210105
	BSPR-03	Blizzard Casualty Trauma Blanket (No heat pads) Premium Large Full length, Multiple access blanket- reduced width.	L	Front & Side	Hook & Loop	23x11x6cm	2.45x1.6m	620g	5060297210112
-	- BPS-44(FP) Blizzard Trauma Blanket with Hook & Loop Closure Full length Blanket (Flat Packed) -		L	Front	Hook & Loop	28x20x4cm	2.3x2.0m	450g	5060297210143
BPS-65(FP)	S-65(FP) Blizzard Trauma Blanket with Hook & Loop Closure Full length Blanket (Flat Packed)		L	Front	Hook & Loop	28x20x4cm	2.3x2.0m	450g	5060297210648
-	BPS-44(VB)	Blizzard Trauma Blanket with Hook & Loop Closure Full length Blanket (Vacuum Packed)	L	Front	Hook & Loop	23x11x5cm	2.3x2.0m	450g	5060297210150
BPS-66(VB)		Blizzard Trauma Blanket with Hook & Loop Closure Full length Blanket (Vacuum Packed)	L	Front	Hook & Loop	23x11x5cm	2.3x2.0m	450g	5060297210655
		TRAUMA BLANKETS - 2 Layer - TOG 5 (2/5)							



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BPS47 NSN 4240-99- 334-1172		Blizzard IFAK (Flat Earth Brown) Half-length Blanket- Lightweight, Ideal for personal emergency kits.	S	Front	-	17x11x2.5cm	1.1x1.56m	1259	5060297210617
-	BPS2-370	Blizzard Compact Trauma Blanket Half-length Blanket- Lightweight, Ideal for personal emergency kits.	S	Front	-	17x11x2.5cm	1.1x1.56m	125g	5060297210181
BPS2- 01(VB)			L	Front	Double Sided Tape	13x11x5cm	2.3x1.56m	260g	5060297210242
BPS2- 01(FP) NSN 4240-99- 308-7086		Blizzard EMS Trauma Blanket Full length Blanket- Lightweight, flat packed.	L	Front	Double Sided Tape	26x19x2cm	2.3x1.56m	260g	5060297210259
-	BPS2-10 (VB)	Blizzard EMS Trauma Blanket Full length Blanket- Lightweight, vacuum packed.	L	Front	Double Sided Tape	13x11x5cm	2.3x1.56m	260g	5060297210204
-	BPS2-10(FP) NSN 4240-99-388- 7390	Blizzard EMS Trauma Blanket Full length Blanket- Lightweight, flat packed.	L	Front	Double Sided Tape	26x19x2cm	2.3x1.56m	260g	5060297210211
		SURVIVAL PRODUCTS - 3 Layer - TOG 7 (3/7)							
BPS-01S NSN 8465-99- 488-9557		Blizzard Survival Blanket. (Slim) Full length Standard Blanket- Reduced width.	L	Front	-	23x11x4cm	2.3x1.56m	360g	5060297210266
	BPS-10S	Blizzard Survival Blanket. (Slim) Full length Standard Blanket- Reduced width.	L	Front	-	23x11x4cm	2.3x1.56m	360g	5060297210273



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BPS-02 NSN 8465-99- 433-4810		Blizzard Survival Bag Full length Emergency Bag.	L	-	-	23x11x4cm	2.3x0.8m	385g	5060297210280
	BPS-11 NSN 8465-99-958- 4315	Blizzard Survival Bag Full length Emergency Bag.	L	-	-	23x11x4cm	2.3x0.8m	3859	5060297210297
BPS-03 NSN 8415-99- 574-0495	NSN 8415-99- Jacket with Reflexcell Body & hood clear		L	-	Over the head	15x11x5cm	1.22x0.8m	260g	5060297210303
	BPS-12 NSN 8415-99-852- 5983	Blizzard Survival Jacket Jacket with Reflexcell Body & hood clear sleeves.	L	-	Over the head	15x11x5cm	1.22x0.8m	2609	5060297210310
BPS-19		Blizzard Rescue Jacket (Long) Full length Jacket with Reflexcell Body, Hood and sleeves.	XL	-	Hook & Loop	24x11x5.5cm	1.8x0.8m	500g	5060297210327
	BPS-15 NSN 8415-99-155- 4748	Blizzard Rescue Jacket (Long) Full length Jacket with Reflexcell Body, Hood and sleeves.	XL	-	Hook & Loop	24x11x5.5cm	1.8x0.8m	500g	5060297210334
		OTHER - 3 Layer - TOG 7 (3/7)							
-	BPS-23	Blizzard Baby Wrap Baby care system- Emergency care for new born. Preferred choice of many EMS Worldwide.	-	-	Double Sided Tape	10x8x2cm	65x24cm	559	5060297210389
-	BPS-24 NSN 8415-99-497- 9789	Blizzard Adult Beanie Hat Beanie Hat- Helps reduce heat loss from head (with strap and kids size available on request).	_	-	-	12x11x1cm	20x26cm	189	5060297210396



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		RETAIL - ACTIVE RANGE - 2 Layer - TOG 5 (2/5)							
-	BPSAR-10	Blizzard Active Range Blanket Full length 2-layer Survival Blanket - Retail packaging.	L	Front	Double Sided Tape	13x11x5cm	2.3x1.56m	2609	5060297210419
-	BPSAR-11	Blizzard Active Range Bag Full length 2-layer Survival Bag Retail packaging.		-	-	13x11x5cm	2.3x0.8m	2809	5060297210426
-	BPSAR-12	Blizzard Active Range Jacket 2 layer Survival Jacket- Retail packaging.	-	-	Over the head	13x11x5cm	1.22x0.8m	230g	5060297210433



5. Materials / Composition

Blizzard Protection Systems Ltd products have a wide range of variations available; The Table below lists all major components within our products, not every product with contain every component as this is application specific. If there is a particular component that you need clarification if it is included in your product, please contact Blizzard Protection Systems Ltd.

Component Name	Product	Composition	MSDS Available on request*	Present in all Reflexcell based products
Film Clear Perforated	Plain polypropylene transparent film Perforated	Extruded transparent sealable film	Yes	Yes
Metallised film Perforated	Metallised polypropylene transparent film Perforated	Extruded transparent sealable film metallised	Yes	Yes
Metallised film printed	Metallised polypropylene film with print in various colours	Extruded transparent sealable film Printed with product specific lnk and lacquer.	Yes	Yes
Rubber yarn	Natural rubber yarn	Natural rubber (polyisoprene) from centrifuged latex concentrate. Rubber compounding. Silicone based coating. Talcum Powder	Yes	Yes
Bags	Vacuum Pouches	Co-extrusion PA/PE film various specifications per product	Yes	Yes
Draw Cord	White	Multifilament polypropylene	Yes	
Hem Clear	40MU Polyethylene	Transparent Polyethylene roll	Yes	
Hem Black	Black opaque Polythene	LLD Ethylene/1-Butene Copolymer	Yes	
Cable ties	Cable tie, white	Nylon	N/A	
Cable ties	Cable tie, Natural	Nylon	N/A	
Clear Tape	Clear polypropylene tape	Polypropylene /acrylic emulsion adhesive	Yes	Yes
Gaffer tape, various colours	Poly-cloth tape various colours	Polyethylene laminated cloth, peel oil, natural rubber, iron oxide	Yes	

Table of Blizzard Product components



Bungee Cords	black shock cord	Polyester Round Braided Elastic	Yes
Hook	Premium grade black hook	Nylon and polyester	N/A
Loop	Premium grade black loop	Nylon and polyester	N/A
Hook & Loop adhesive tape	Double coated polypropylene tape	Hotmelt rubber adhesive with polypropylene film.	Yes
Double Sided Tape	D/S NW Adhesive Tap	Double coated pressure sensitive adhesive tape	Yes
Double Sided wide tape	Pressure sensitive adhesive tape	Double Coated Tissue: Hotmelt rubber adhesive White Tissue carrier Silliconised paper liner	Yes
Red lift tape	Pressure sensitive adhesive tape	Double coated tape: Solvent based acrylic adhesive, polyester film and polypropylene liner	Yes
Carry Sheet	Blizzard Carry Sheet	PU Coated Nylon with Polyester webbing	Yes
Glue	Techbond 214/43 HMA (GLU042)		Yes
Rubber Draw Elastic	Elastic 20/4 Grey	20-gauge Grey Rubber thread	Yes
Toggles	Cord Lock Toggles	Black Acetal	Yes

6. Basic Risk Assessment

Legend:

- Minimal risk Very low chance that the risk may occur.
- 2. Medium risk Slight chance that the risk may occur.
- High risk Highly probability that the risk will occur.
- A. No permanent injury should occur.
- B. A possibility that permanent injury could occur.
- C. High probability that permanent injury will occur.



Risk Analysis Table for Base Reflexcell Products

Risk	Description	Probability	Prevention/solution
Suffocation	The materials can suffocate in extreme circumstances	1C	Keep the face exposed
Lifting	The materials are not designed for lifting a patient	2B	Do not lift the patient using the bag
Adhesive failure	The adhesive has been tested to -40°C	2A	Do not use below -40°C If adhesive fails, the bag will continue to function and can be tied or taped together.
Tearing	The blanket may be inadvertently torn	1A	Open the bag as per the instructions included with it. Small tears can be repaired using tape
Burning	The material is flammable	3B	Keep away from naked flames
Strangulation	The cord can wrap around your neck	1A	Make sure cord is not wrapped around your neck
Trip hazard	Bungee cords may cause a trip hazard	1A	Ensure bungees are tucked inside blanket

7. CE certification

All Blizzard Protection Systems products are certified suitable for CE application They are registered with the MHRA as Class 1 medical devices and have been assessed for compliance with the following directives and standards in part or in full Medical Device Regulation 745/2017/EU, EN 15223-1: 2016, EN 1041: 2008+A1: 2013, EN 10993-1: 2018, EN ISO 14971: 2019

8. Declaration of Conformity

The current CE Declaration of conformity can be requested from the Blizzard Protection Systems team.



9. Reach Regulation 1907/2006

Blizzard Protection Systems Limited confirms that none of the products supplied by Blizzard Protection Systems Limited contain any chemicals as deemed as "Restricted Chemicals" in higher than permitted levels as mentioned in Annex XVII of the Reach Regulation 1907/2006.