


This MotoCAP safety rating applies to:

Brand: Bull-it
Model: SP120 Lite Heritage Easy
Type: Pants - Denim
Date purchased: 4 July 2018
Sizes tested: 36
Gender: M
Style: All Purpose
Test code: P18D03

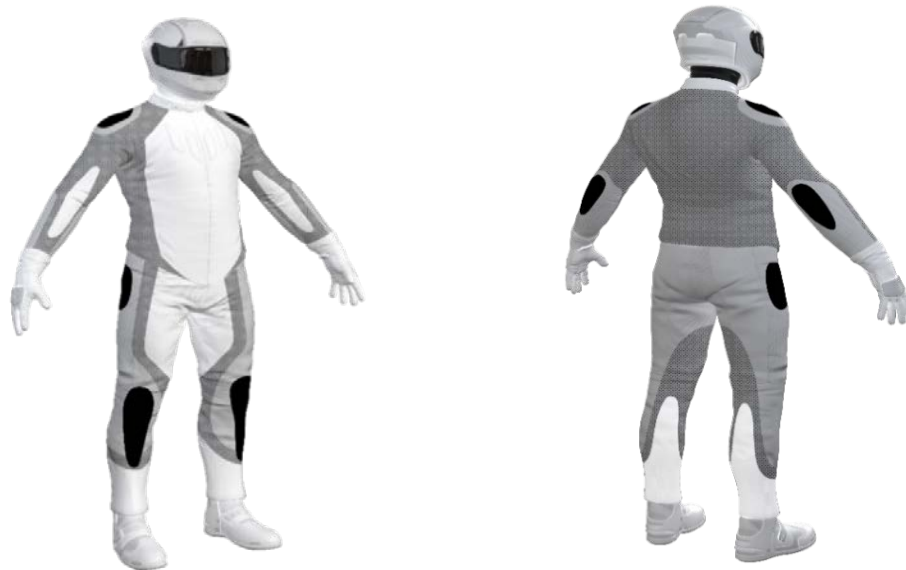
Test Results Summary:

	Rating	Result
MotoCAP Protection Rating	★	23.2
Abrasion	2/10	1.42
Burst	8/10	804
Impact	1/10	0.0
MotoCAP Comfort Rating	★★★	0.515
Moisture Vapour Resistance		22.5
Thermal Resistance		0.193
Water Resistance	N/A	

This garment is fitted with pockets for impact protectors for the knees and hips but was not fitted with impact protectors.

Jacket and Pants - Crash Impact Risk Zones

This diagram is a pictorial representation of the crash impact risk zones.


Zone 1

High risk of abrasion
High risk of impact

Zone 2

High risk of abrasion

Zone 3

Medium risk of abrasion

Zone 4

Low risk of abrasion

Bull-it
SP120 Lite Heritage Easy

Abrasion Resistance

The garment was tested for abrasion resistance following the MotoCAP test protocols. The table below shows the test results for time to abrade through all layers of the materials. Calculated for each sample by Zone, type and area coverage of each material as a proportion of that Zone.

Details of materials used in garment:

Material A: Single layer of denim outer, kevlar knitted fabric plus mesh inner liner
 Material B: Single layer of denim outer plus mesh inner liner
 Material C: Single layer of denim

Zone	Coverage (%)	Abrasion time for each test (s)						Average (s)	
		1	2	3	4	5	6		
Zone 1 and 2 areas (High abrasion risk)									
Material A	100%	1.89	2.14	2.02	1.32	2.27	2.55	2.03	M
Zone 3 area (Medium abrasion risk)									
Material B	50%	0.87	0.71	0.46	0.95	0.56	0.44	0.66	P
Material C	50%	0.42	0.31	0.39	0.37	0.31	0.37	0.36	P
Zone 4 area (Low abrasion risk)									
Material B	50%	0.87	0.71	0.46	0.95	0.56	0.44	0.66	M
Material C	50%	0.42	0.31	0.39	0.37	0.31	0.37	0.36	P

The diagram below is a visual indication of the likely abrasion performance of the materials in each Zone calculated from the data in the table above.



Determining Criteria		Good	Acceptable	Marginal	Poor
High abrasion risk	Zone 1/2:	> 5.6	3.0 - 5.6	1.3 - 2.9	< 1.3
Medium abrasion risk	Zone 3:	> 2.5	1.8 - 2.5	0.8 - 1.7	< 0.8
Low abrasion risk	Zone 4:	>1.5	1.0 - 1.5	0.4 - 0.9	< 0.4

Burst Strength

The garment's burst strength was tested following the MotoCAP test protocols. The table below shows the burst pressure in kilopascals (kPA) for each sample tested by Zone and the average result for each Zone.

Burst pressure (kPA)

Area	1	2	3	4	5	Average	
Zones 1 & 2	820	1209	1152	639	865	937	A
Zone EZ	742	646	725	678	684	695	M
Zones 3 & 4	920	806	855	607	594	757	M

The diagram below illustrates the burst strength results in terms of the likely performance of the garment in an impact and is a pictorial representation of the data from the table above.



Determining Criteria

Burst strength



Impact Protection

The garment was tested for impact protection and coverage following the MotoCAP test protocols. The table below shows the test results for each strike on each impact protector in kilonewton (kN) and their area of coverage in percentage (%) within the Zone.

Impact protector type	Knee		Hip	
Average force (kN)	50.0	P	50.0	P
Maximum force (kN)	50.0	P	50.0	P
Coverage of zone 1 area	0%		0%	
Coverage of zone after displacement	0%		0%	

Individual test results

Impact force (kN)	Knee			Hip		
	A	B	C	A	B	C
Impact Protector 1	50.0	50.0	50.0	50.0	50.0	50.0
Impact Protector 2						
Impact Protector 3						

The diagram below is a visual indication of the likely impact performance of each impact protector calculated from the data in the table above.



Determining Criteria	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="background-color: #00FF00; border-radius: 10px; width: 20px; height: 10px;"></div> <div style="background-color: #FFFF00; border-radius: 10px; width: 20px; height: 10px;"></div> <div style="background-color: #FFA500; border-radius: 10px; width: 20px; height: 10px;"></div> <div style="background-color: #FF0000; border-radius: 10px; width: 20px; height: 10px;"></div> </div>			
	Good	Acceptable	Marginal	Poor*
Burst strength (kN)	< 15	15 - 24	25 - 30	> 30

* Poor may also indicate that no impact protector, or impact protector pocket is present in the garment

Thermal comfort

The garment was tested for thermal comfort following the MotoCAP test protocols. The table below shows the moisture vapour resistance and the thermal resistance values obtained.

	1	2	Average
Moisture Vapour Resistance - R_{et} (kPam ² /W)	23.5	21.5	22.5
	1	2	Average
Thermal Resistance - R_{ct} (Km ² /W)	0.190	0.196	0.193

Water spray and rain resistance

This garment has not been advertised as water resistant so has not been tested for water spray and rain resistance.