


**This MotoCAP safety rating applies to:**

<b>Brand:</b>	Rjays
<b>Model:</b>	Pilot
<b>Type:</b>	Jacket - Textile
<b>Date purchased:</b>	16 November 2019
<b>Sizes tested:</b>	XL and 3XL
<b>Gender:</b>	M
<b>Style:</b>	Tourer
<b>Test code:</b>	J19T33

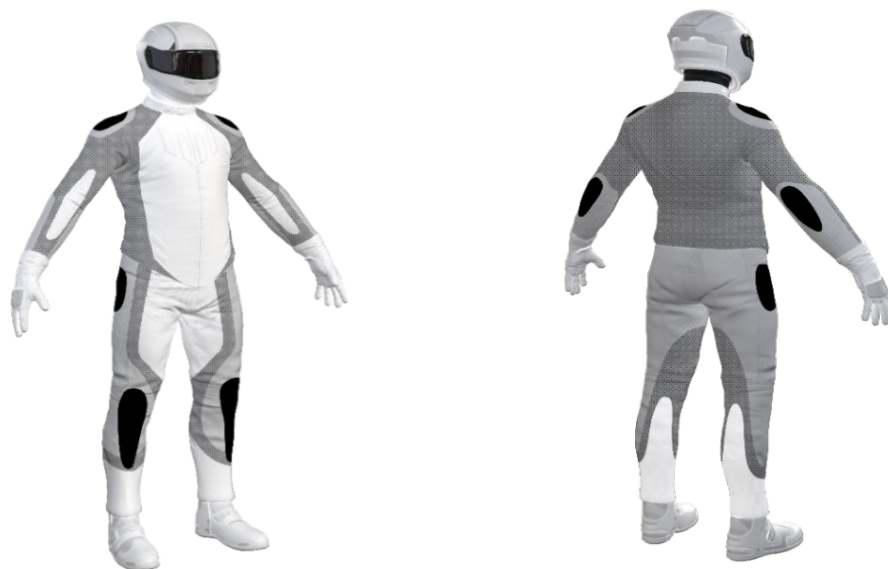
**Test Results Summary:**

	Rating	Score
MotoCAP Protection Rating	★★	29.2
Abrasion	1/10	1.21
Burst	10/10	1034
Impact	6/10	42.8
MotoCAP Comfort Rating	↘	0.125
Moisture Vapour Resistance		151.6
Thermal Resistance		0.315
Water resistance	1/10	34

This garment is fitted with impact protectors for the elbows, shoulders and back. There are vents in the chest, arms and back to allow airflow movement through the garment. The thermal comfort rating is based on tests of the breathability of the garment when all vents are closed. The thermal comfort of this product may be better when the vents can be opened.

**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

## Abrasion Resistance

The garment was tested for abrasion resistance in accordance with 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:	Plastic plate coated woven fabric shell, water resistant layer and mesh inner liner
Material B:	Textile fabric shell, water resistant layer and mesh inner liner

Zone	Coverage (%)	Abrasion time for each test (seconds)						Average (seconds)	
		1	2	3	4	5	6		
Zone 1 and 2 areas (High abrasion risk)									
Material A	80%	2.45	2.41	2.52	2.63	2.40	2.30	2.46	M
Material B	20%	0.86	0.63	0.54	0.79	0.89	0.57	0.71	P
Zone 3 area (Medium abrasion risk)									
Material B	100%	0.86	0.63	0.54	0.79	0.89	0.57	0.71	P
Zone 4 area (Low abrasion risk)									
Material B	100%	0.86	0.63	0.54	0.79	0.89	0.57	0.71	M

Abrasion times are capped at a maximum of 10.00s.

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. The colour coding is based on the worst performing material in each zone.



		Good	Acceptable	Marginal	Poor
<b>Determining Criteria</b>					
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 in accordance with 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	935	1620	1314	1220	1000	1218	G
Zone EZ	904	806	598	1563	1308	1036	G
Zones 3 & 4	781	751	435	464	889	664	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

	Good	Acceptable	Marginal	Poor
(kPa)	> 1000	800 - 1000	500 - 799	< 500

## Impact Protection

The garment was tested for impact protection and coverage in accordance with MotoCAP test protocols. The table below shows the test results for each strike on each impact protector in kilonewtons (kN) and their area of coverage as a proportion (%) of the Zone.

Impact protector type	Elbow		Shoulder	
Average force (kN)	20.5	A	17.5	A
Maximum force (kN)	26.1	M	22.1	A
Coverage of zone 1 area	130%		130%	
Coverage of zone after displacement	40%		90%	

### Individual test results

Impact force (kN)	Elbow			Shoulder		
Strike location	A	B	C	A	B	C
Impact Protector 1	19.0	20.9	25.1	17.4	18.9	22.1
Impact Protector 2	16.3	17.9	24.9	14.8	18.5	18.1
Impact Protector 3	16.4	17.9	26.1	13.8	14.9	18.6

The diagram below is a visual indication of the likely performance of each impact protector calculated from the data in the table above. The colour coding is based on the worst performing score for average or maximum force for each impact zone.



Determining Criteria		Good	Acceptable	Marginal	Poor*
Impact force	(kN)	< 15	15 - 24	25 - 30	> 30

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

Areas shaded black are not considered in the impact protection ratings.

### 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 <sup>2</sup> /W)	162.4	140.9	151.6
	1	2	Average
Thermal Resistance - $R_{ct}$ (Km <sup>2</sup> /W)	0.325	0.305	0.315

### Water spray and rain resistance

This garment is advertised as water-resistant, and so has been tested for water spray and rain resistance according to the MotoCAP test protocols. The table below shows the water absorbed (ml) and the wetting proportion (%) of the garment and undergarments due to water absorption.

	Water absorbed by garment		Water absorbed by underwear	
	Volume (ml)	Percentage (%)	Volume (ml)	Percentage (%)
Jacket 1	394	22%	70	24%
Jacket 2	589	32%	130	44%
<b>Average</b>	491	27%	100	34%

### Location of wetting:

Visible wetting to the cotton underwear was present over the chest and waistband of one jacket and the neck and waistband of the other jacket tested.

### Assessment Details.

Brand	Rjays
Model	Pilot
Type	Jacket - Textile
Date purchased	16 November 2019
Tested by	AMCAF, Deakin University
Garment test reference	J19T33
Rating first published	June 2020
Rating updated	1 October 2021