


**This MotoCAP safety rating applies to:**

<b>Brand:</b>	RST
<b>Model:</b>	Adventure III
<b>Type:</b>	Pants - Textile
<b>Date purchased:</b>	15 August 2019
<b>Sizes tested:</b>	2XL and 4XL
<b>Gender:</b>	M
<b>Style:</b>	Tourer
<b>Test code:</b>	P19T05

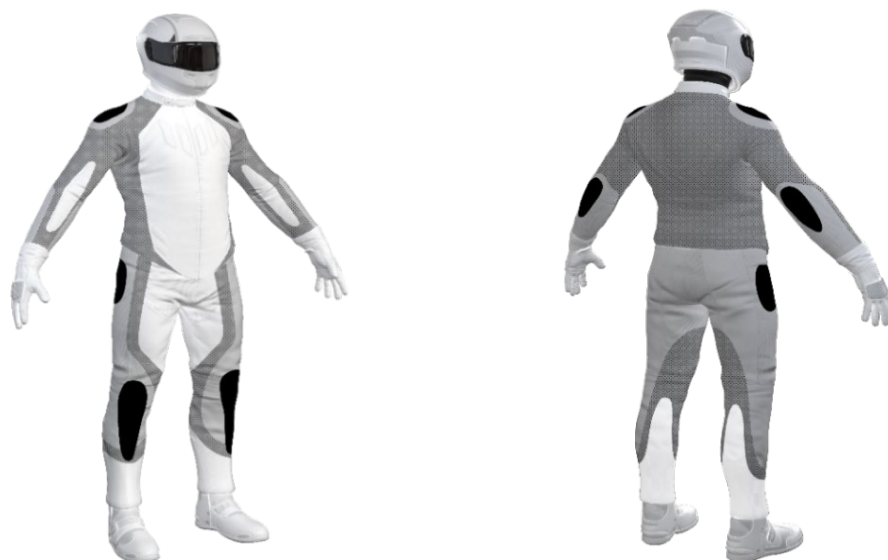
**Test Results Summary:**

	Rating	Score
MotoCAP Protection Rating	★	15.0
Abrasion	1/10	0.44
Burst	10/10	1214
Impact	1/10	0.0
MotoCAP Comfort Rating	★★★	0.433
Moisture Vapour Resistance		34.6
Thermal Resistance		0.249
Water resistance	4/10	15

This garment is fitted with impact protectors for the knees. Pockets are provided at the hips for aftermarket impact protectors. Vents are provided on the fronts of the upper legs 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. This garment was also tested with the water-resistant liner installed, which reduced the comfort score to 2 stars.

**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:	High density woven fabric shell with mesh inner liner
Material B:	Woven fabric shell with mesh inner liner
Material C:	Stretch fabric shell with 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	50%	1.22	1.15	1.08	1.28	2.29	1.06	1.34	M
Material B	50%	0.50	0.83	0.45	0.54	0.40	0.59	0.55	P
Zone 3 area (Medium abrasion risk)									
Material B	90%	0.50	0.83	0.45	0.54	0.40	0.59	0.55	P
Material C	10%	0.58	0.59	0.57	0.50			0.56	P
Zone 4 area (Low abrasion risk)									
Material A	50%	1.22	1.15	1.08	1.28	2.29	1.06	1.34	A
Material B	50%	0.50	0.83	0.45	0.54	0.40	0.59	0.55	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.



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 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	1940	938	878	1529	1946	1446	G
Zone EZ	1340	1686	1326	463	569	1077	G
Zones 3 & 4	914	561	945	1234	1468	1025	G

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	Knee			Hip					
Average force (kN)	9.2	G			P				
Maximum force (kN)	12.4	G			P				
Coverage of zone 1 area	140%				0%				
Coverage of zone after displacement	40%				0%				
<b>Individual test results</b>									
Impact force (kN)	Knee			Hip					
Strike location	A	B	C	A	No impact protector present				
				B		C			
Impact Protector 1	8.4	7.2	12.4						
Impact Protector 2	8.1	8.6	12.2						
Impact Protector 3	7.2	7.6	11.1						

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 - $R_{et}$ ( $kPam^2/W$ )	31.4	37.7	34.6

	1	2	Average
Thermal Resistance - $R_{ct}$ ( $Km^2/W$ )	0.253	0.246	0.249

### 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 (%)
Garment 1	478	24%	73	29.5%
Garment 2	581	29%	1	0.4%
<b>Average</b>	529	27%	37	15.0%

### Location of wetting:

Visible wetting to the cotton underwear worn under the motorcycle water resistant garment was present over the crotch on one garment tested and there was no visible wetting on the other garment tested.