



### This MotoCAP safety rating applies to:

**RST Brand** Model Skinny Type Pants - Denim Date purchased 25 May 2021 Sizes tested 12 and 16 Test garment gender Female Style Sports RRP \$199.95

<b>Test Results Summary</b>	Rating	Score
MotoCAP Protection Rating	*	14.9
Abrasion	1/10	0.80
Burst	10/10	1084
Impact	1/10	0.0
MotoCAP Breathability Rating	***	0.460
Moisture Vapour Resistance	-	29.0
Thermal Resistance	-	0.223
Water resistance	N/A	N/A

This garment is not fitted with impact protectors. There are no pockets provided at the knees or hips for fitting aftermarket impact protectors. Adding knee and hip impact protectors would improve the protection levels of this garment. There are no vents to allow airflow movement through the garment.

#### **Jacket and Pants - Crash Impact Risk Zones**

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

		Removable   Thermal liner Water-resista  Removable   Knee Hip	
Zone 1	Zone 2	Zone 3	Zone 4
	High call of the calls	NA di un dal la Calculata	
High risk of abrasion	High risk of abrasion	Medium risk of abrasion	Low risk of abrasion
High risk of impact			



#### **Abrasion Resistance**

These pants were tested for abrasion resistance in accordance with MotoCAP test protocols. 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 below. The colour coding is based on the worst performing material in each zone.



#### **Abrasion Resistance Performance**

Abrasion rating 1/10 Abrasion score 0.80

<b>Determining Criteria</b>	Area	Good	Acceptable	Marginal	Poor
High abrasion risk	Zones 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

**Individual Abrasion Resistance Results:** - 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. Abrasion times are capped at a maximum of 10.00s.

#### Abrasion time for each test (seconds)

80%				Sample 4	Sample 3	Sample 6	Average
00 /0	1.73	1.16	2.40	2.69	2.10	1.84	1.99
20%	0.45	0.47	0.39	0.29	0.41	0.27	0.38
Coverage (%)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Average
100%	0.45	0.47	0.39	0.29	0.41	0.27	0.38
Coverage (%)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Average
100%	0.45	0.47	0.39	0.29	0.41	0.27	0.38
	Coverage (%) 100% Coverage (%)	Coverage (%) Sample 1 100% 0.45 Coverage (%) Sample 1	Coverage (%)Sample 1Sample 2100%0.450.47Coverage (%)Sample 1Sample 2	Coverage (%)Sample 1Sample 2Sample 3100%0.450.470.39Coverage (%)Sample 1Sample 2Sample 3	Coverage (%)Sample 1Sample 2Sample 3Sample 3100%0.450.470.390.29Coverage (%)Sample 1Sample 2Sample 3Sample 4	Coverage (%)Sample 1Sample 2Sample 3Sample 3Sample 4Sample 5100%0.450.470.390.290.41Coverage (%)Sample 1Sample 2Sample 3Sample 3Sample 4Sample 5	Coverage (%)Sample 1Sample 2Sample 3Sample 4Sample 5Sample 6100%0.450.470.390.290.410.27Coverage (%)Sample 1Sample 2Sample 3Sample 4Sample 5Sample 6

#### Details of materials used in jacket

Material A	Denim fabric shell with para-aramid inner liner
Material B	Denim fabric layer with mesh inner liner



## **Burst Strength**

These pants were tested for burst strength in accordance with MotoCAP test protocols. 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 below.



### **Burst Strength Performance**

Burst rating	10/10
Burst score	1084

<b>Determining Criteria</b>	Unit	Good	Acceptable	Marginal	Poor
Burst strength	(kPa)	> 1000	800 - 1000	500 - 799	< 500

**Individual Burst Strength Results:** - 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 for each seam (kPA)

Area	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Average	
Zones 1 & 2	1948	1398	1589	834	966	168	1150	G
Zones 3 & 4	604	769	1109	892	974	560	818	Α



#### **Impact Protection**

These pants were tested for impact protection and coverage in accordance with MotoCAP test protocols. The diagram below is a visual indication of the likely performance of each impact protector calculated from the data in the table below. The colour coding is based on the worst performing score for average or maximum force for each impact zone. Areas shaded black are not considered for impact protection ratings.



### **Impact Protection Performance**

Impact rating 1/10 Impact score 0.0

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

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

**Impact Protector Results:** - The table below shows the average and maximum force transmitted through each impact protector type in kilonewtons (kN) and their area of coverage as a proportion (%) of the Zone.

Impact protector type	Knee	Hip
Average force (kN)	P	P
Maximum force (kN)	P	P
Coverage of Zone 1 area	<del>_</del>	_
Coverage of Zone after displacement	nt	

**Individual Impact Protector Results:** - The table below shows the test results for each strike on individual impact protectors in kilonewtons (kN) and the position of the strike. Individual strike results are capped at a maximum of 50kN.

## Force transfer for each impact strike (kN)

Impact protector type	Knee	No impact pro	tector present	Hip	No impact pro	tector present
Strike location	Centre	Mid	Edge	Centre	Mid	Edge

Impact Protector 1

Impact Protector 2

Impact Protector 3



### **Breathability**

These pants were tested for breathability following the MotoCAP test protocols. The table below shows the moisture vapour resistance and the thermal resistance values obtained.

Without removable li	ners	With	n water-resist	ant liner
Breathability rating	***	Breat	N/A	
Breathability score	0.460	Breathability score		N/A
Moisture Vapour Resis	tance - R <sub>et</sub> (kPa.m²/W)	1	2	Average
Without removable liners	3	29.2	28.9	29.0
With water-resistant line	r	N/A	N/A	N/A
Thermal Resistance - F	R <sub>ct</sub> (K.m²/W)	1	2	Average
Without removable liners	3	0.232	0.213	0.223
With water-resistant line	r	N/A	N/A	N/A

# Water spray and rain resistance

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

### **Assessment Details.**

Brand RST Model Skinny

Type Pants - Denim
Date purchased 25 May 2021

Tested by AMCAF, Deakin University
Report approved by MotoCAP Chief Scientist

Garment test reference P20D17

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